

Fostering design students' creativity through reflective practice

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Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the authorship owner thereof and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Signature:

Date: October 2017

Abstract

This study reports on an action research project I undertook at the Elizabeth Galloway Academy of Fashion together with 3rd year fashion design students. The focus of the study was the fostering of my design students' creativity through reflective practices. Reflection on my previous teaching practices revealed challenging aspects which were hindering my design students' creativity and this was used as a catalyst to introducing reflective practices into my teaching approach. This introduction of reflective practices, in turn, led me to adopting a change in my teaching practice from one of teaching creatively, to teaching for creativity. A thorough review of the relevant literature aided the design of lesson plans, incorporating dialogical reflective practices, focusing on critical friend discussions, peer group discussions, and one-on-one student facilitator feedback sessions. The action research study was conducted over two action research cycles. The first action research cycle was aimed at changing my teaching practice, introducing the students to the concept of reflection, and facilitating various reflective activities within the initial conceptual design process of the self-expressive design brief presented to the participating students. The second action research cycle was an attempt at fostering creativity in my design students through reflective practices. The planning for action research cycle 2 was a refinement of the activities in action research cycle 1, following practitioner reflections and colleague validation discussions on the outcomes of the first cycle. The facilitator observations, as well as participant feedback that was supported by the relevant literature found that reflective activity practiced within the fashion design process allows the students to communicate and engage with their peers, which evokes self-awareness and self-direction. The reflective activities encourage the students to assess their design process, develop an understanding of context, compare different design projects, rethink dominant design choices, and identify unconscious aspects of the design problem. This repeated testing of the design problem, dialogically, enhances the reflective process and aids the students in gaining clarity and confidence in their design concepts. When a design student is confident and clear on his or her design direction, their creativity is stimulated. Limiting apprehension, lack of self-awareness, and reservation within the students allows for autonomy of self-expression to develop. In conclusion, if practiced appropriately, reflective practices within the design process can foster the creativity of design students.

Opsomming

Hierdie studie rapporteer 'n aksienavorsingsprojek wat ek onderneem het by die Elizabeth Galloway Academy of Fashion tesame met die derdejaar mode-ontwerp studente. Die fokus van die studie was die bevordering van my ontwerpstudente se kreatiwiteit deur middel van reflektiewe praktyke. Refleksie op my vorige onderrigpraktyke het uitdagende aspekte wat my ontwerpstudente se kreatiwiteit verhinder onthul, en is gebruik as 'n katalisator om reflektiewe praktyke bekend te stel binne my onderrigbenadering. Hierdie bekendstelling van reflektiewe praktyke het my oortuig om my onderrigpraktyk te verander van kreatiwiteit-onderrig, na onderrig vir kreatiwiteit. 'n Deeglike oorsig van die relevante literatuur het die ontwerp van lesplanne, inkorporering van dialogiese reflektiewe praktyke, 'n fokus op kritiese vriendbesprekings, ewekniebesprekings, en een-tot-een student-fasiliteerder terugvoersessies bevorder. Die aksienavorsingstudie is voltooi oor twee aksienavorsingsiklusse. Die eerste aksienavorsingsiklus was gemik op die verandering van my onderrigpraktyk, die bekendstelling van studente aan die konsep van refleksie, en die fasilitering van verskeie reflektiewe aktiwiteite binne die aanvanklike konseptuele ontwerpproses van die self-ekspressiewe ontwerpdrag aangebied aan die deelnemende studente. Die tweede aksienavorsingsiklus was 'n poging om kreatiwiteit binne my ontwerpstudente te bevorder deur reflektiewe praktyke. Die beplanning vir aksienavorsingsiklus 2 was 'n verfyning van die aktiwiteite in aksienavorsingsiklus 1, op grond van praktisynrefleksies en kollega bevestigingsbesprekings oor die uitkomste van die eerste siklus. Die fasiliteerder se waarnemings, sowel as deelnemerterugvoer wat ondersteun is deur die relevante literatuur het gevind dat reflektiewe aktiwiteit wat beoefen is binne die mode-ontwerpproses studente in staat gestel het om met hul eweknieë te kommunikeer en te interakteer, wat self-bewussyn en self-gerigtheid ontlok het. Die reflektiewe aktiwiteite het studente aangemoedig om hul ontwerpproses te assesser, 'n begrip vir konteks te ontwikkel, verskillende ontwerpprojekte te vergelyk, dominante ontwerpkeuses te heroorweeg, en onbewuste aspekte van die ontwerpprobleem te identifiseer. Hierdie herhalende dialogiese toetsing van die ontwerpprobleem het die refleksieproses bevorder en die studente gehelp om klarigheid en selfvertroue te verkry in hul ontwerpkonsepte. Wanneer 'n ontwerpstudent selfvertroue het en duidelikheid het oor sy of haar ontwerprigting, word hul kreatiwiteit gestimuleer. Beperking van vrees, 'n gebrek aan self-bewustheid, en voorbehoud binne studente laat die ontwikkeling van outonomie van self-uitdrukking toe. Ter opsomming, indien toepaslik bedryf, kan reflektiewe praktyke binne die ontwerpproses kreatiwiteit van ontwerpstudente bevorder.

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List of Abbreviations

EGAF – Elizabeth Galloway Academy of Fashion

POPI – Protection of Personal Information Act

AERA – American Educational Research Association

Chapter 1

Orientation to the study

1.1 Introduction

The importance of creativity in design is evident for all design disciplines, yet how creativity can be developed in design education is an ongoing exploration. The aim of this study is to foster design students' creativity, specifically through reflective practice, within a fashion design context. This chapter serves to introduce the key concepts of creativity and reflection, as well as provide an overview of the research design and methodology used to conduct this study. The limitations and ethical considerations are also addressed, concluding with a chapter outline for the report.

1.2 Motivation for the study

I am the head of the Design Department and senior lecturer in design at the Elizabeth Galloway Academy of Fashion (EGAF) and have been lecturing for 15 years. As a reflective practitioner myself, I am constantly reviewing how I can improve my professional practice in design education. In a recent review of my 2016 purposeful reflections, I have concluded that a shift from teaching creatively to teaching for creativity (as described by Jeffery and Craft, 2004; Rutland and Barlex, 2008) is necessary in order to further promote creativity within the conceptual and creative design phase of the design process practiced at the EGAF. Teaching for creativity refers to developing a person's creative thinking and ability, shifting the focus from the teacher to the learner, and contributing to self-directed learning through reflection (Owens, 2007) in an inclusive approach (Jeffery and Craft, 2004). Mezirow (1985) suggests that a critical awareness of meaning and self-knowledge is a key dimension of self-directedness and argues that the ultimate form of self-directed learning is realized when external activities and internal reflective dimensions are fused.

Fostering creativity is seen as the catalyst for the inclusion of reflection with in my teaching approach, with the intention that a new approach may alleviate challenging aspects identified in the review of my 2016 practitioner reflections, which were hindering student creativity. In doing so, I aimed to foster creativity through reflective practices. However, the real question at hand remained, *how?*

In this study I continued with my personal practitioner reflective process. Peters's (1991) four-stage DATA reflective model was my preferred reflective practice model. This process (built on the work of Murray and Lafrenz, 2016) is conceptualised as follows:

- the process began with a description or reflection of a critical aspect of practice;
- in the second stage, the assumptions that supported my approaches and motives related to the teaching and learning of creativity were analysed;
- in the third stage I theorized about new ways to approach or foster creativity; and
- this new theory was then tested in the fourth stage (Murray and Lafrenz, 2016).

This process complemented and lent itself to an action research approach as a means to collect the relevant data needed to consider whether the changes that were made are beneficial to the students, the curriculum, and the creativity aspects set with in the project brief. To test the new theory and answer the *how* question, I planned to embed various affective reflective practices with in my lesson plans (see appendix 1 and 2). These practices included: group reflection activities, paired peer reflection, personal reflective exercises, one-on-one interactive feedback sessions, dialogue promotion, artefact reflection, and reflection through drawing. The reflective activities were conducted as guided class activities (see appendix 10, 11, 12, 13), giving the researcher/facilitator an opportunity to observe the participants in practice. The observation schedule can be viewed in appendix 8.

There is no doubt that practitioner reflective practices are a vital part of any educator's personal and professional development. This is echoed throughout the literature (Dewey, 1933; Boud, Keogh and Walker, 1985; Schön, 1987; Mezirow, 1990; Moon, 1999). Acting on one's critical reflections, however, is the key to making change. The intent of my reflective practice was to further promote creativity within the Design module by embedding reflective activities into the lesson plans to positively affect students' learning and overcome aspects that were hindering creativity.

Teaching for creativity through reflective activities fosters creativity in art and design students (Craft, 2005) and aids in setting lifelong reflective strategies to be implemented in their personal design process, as independent designers or within the clothing industry. Teaching for creativity is described as having three facets, encouraging, identifying and fostering (Jeffery and Craft, 2004). *Encouraging* mainly has to do with establishing a classroom environment and student attitudes that support creativity. *Identifying* focuses on helping students discover and ascertain their own creative strengths, while *fostering* provides opportunities for students to develop their creativity authentically within the design process. This study will focus on fostering authentic creativity through reflective practices or activities within the fashion design process practiced at EGAF.

Reflective thinking is a learned process (Mezirow, 1990). Facilitators should therefore never assume that successful reflective practices are taking place. Reflective exercises or practices should be guided and planned, allowing time within their scheduled classes for these exercises to take place (McClure, 2005). It is also important that a safe, comfortable environment be created where learners are at ease sharing and developing solutions without any forms of intimidation or prejudice to influence the process (Mezirow, 1990).

Reflection as a tool to promote creativity has been widely researched (Lawson, 2005; Ryan and Ryan, 2010), but literature focused on reflective practices within fashion design is limited (James, 2007; McDonald and Bigelow, 2010; Sharmin and Bailey, 2011; Allen and Evans, 2012; Murray and Lafrenz, 2016), with most of these authors focusing on the reflection of the end product or artefact as opposed to the use of reflection to foster creativity within the design process. These authors have, however, identified reflective practices best suited for fashion design students, to be used with in the design

process or in a more holistic manner. James (2007) states that written reflections are not necessarily best suited for the fashion design student and that non-traditional academic format, such as visual journaling, videos and blogging could be adopted. Other reflective activities discussed in the literature which are viewed as beneficial to the fashion design student include drawing (James, 2007), artefact reflection (Sharmin and Bailey, 2011), self-evaluation (Lowy, 2001), inter-active verbal feedback between facilitator and student (McDonald and Bigelow, 2010), peer discussions (James, 2007), and focus groups (Schön, 1987).

My intent was to embed a number of these reflective activities into the lesson plans geared towards fostering creativity (Allen and Evans, 2012; Ryan and Brough, 2012), in the initial stages of the design process practiced at the EGAF. This action is supported by Lowy (2001), who states that reflection within the design process to evoke self-awareness, self-direction and self-evaluation to further promote and develop creativity is as vital as reflecting on the end product. This self-awareness, and the self-confidence provoked by this awareness, is key to promoting design creativity beyond graduation. The considerations led me to the research questions for this study.

1.3 Problem statement and research question

1.3.1 Research question

The primary research question for this study was:

How can I foster design students' creativity through reflective practice?

1.3.2 Subsidiary questions

Subsidiary questions within this study included:

- How are effective reflective practices utilised to foster design students' creativity?
- How will a shift from teaching creatively to teaching for creativity aid in fostering creativity?
- How does one foster creativity in the design process, through reflection?

1.4 Defining the key terms

1.4.1 Creativity

In the context of product, creativity is defined as being “the interaction among aptitude, process and environment by which an individual or group produce a perceptible product that is both novel and useful as defined within a social context” (Plucker, Beghetto and Dow, 2004, p. 48).

In the context of learning, creativity is referred to as “seeing, thinking and inventing unquestioning” (Craft et al., 2001, p. 7). Furthermore, the ability to learn, make new links and develop new skills without producing any tangible product is deemed an act of creativity (Craft et al., 2001, p. 7).

1.4.2 Reflection

Osterman (1990) defines reflective practice as mindful consideration of one's actions, specifically professional actions. Within this definition, reflective practice is seen as challenging, focused and a critical assessment of one's own behaviour as a means towards developing craftsmanship.

The definitions reflected above are most apt for the context of this study, both the concept of creativity and reflection are explored further in Chapter 2.

1.5 Overview of the research design and methodology

An action research methodology, conducted in a critical paradigm, was adopted for this study. The living educational theory phraseology of McNiff and Whitehead (2006) stimulated this approach, which entails a critical and transformational approach to action research. The living educational theory confronts the researcher to challenge the status quo of their educational practice and answer the question, *How can I improve what I am doing?* The vision of the living education theory researcher is to make an original contribution to knowledge through generating an educational theory proven to improve the learning of people in a social learning space. More detail on the action research methodology and the research design practiced in this study is dealt with in Chapter 3.

1.6 Limitations and delimitations

The limitations and delimitations of the study are included to help the reader get a truer sense of what the findings of the study mean, and how transferable they may be. Although the research design has to a large extent attempted to counter encroaching limitations and delimitations, those eluding the researcher are discussed below:

- The study is limited to a single institution.
- The purposeful selection of the sample group limits the number of possible participants to 20.
- Since participation was voluntary, participants could withdraw from or decline to participate before the onset of the study or after the study had commenced.
- The action plan is embedded into the academic lesson plans designed by the researcher and attendance to these specific lessons, by the participants, was not guaranteed.
- The size and contextual nature of the study limits transferability.
- The lack of generally agreed criteria for evaluating action research may complicate scholarly communication.

1.7 Ethical considerations

Practitioner action research faces the ethical dilemma in creating the dual role of practitioner and researcher. This dual role leads us to making decisions not purely on research grounds but equally on pedagogical outcomes. The role also places the researcher in a position of authority as the participants' educator/facilitator and care had to be taken not to influence or coerce the students in any way (Norton, 2014; McNiff, 2002). To ensure that good ethical conduct was maintained, I applied the three basic principles of ethical research, namely: informed consent, confidentiality, and protection from harm (Norton, 2014).

The research study involved 3rd year students, as well as colleagues at the EGAF. Prior to the study the participants were informed verbally regarding the aims and objectives of the study. A detailed information sheet documenting the intent and expectations was presented to the students along with the consent form (see appendix 5). Participation in the project was compulsory for all students as it forms part of the academic requirements for the Design 3 module; however, students could have opted not to form part of the study sample group. Participation in the surveys was voluntary. The signing of the consent form took place before the presentation of the project brief. However, given the fluid nature of action research, on-going informed consent and participant consultations were part of the process. Consent was reviewed at each transition of the study. Status reports were presented to the colleague validation group between transitional points and modifications of practice. Relevant ethical considerations are included in the informed consent forms issued to the participants and a full code of ethics will be made available for the participants' perusal.

Individual confidentiality was upheld throughout the study of both student and colleague participants. Data was only reported on and discussed in terms of findings and observations and was only used for academic purposes, and to improve existing practice at the EGAF. Questionnaires and surveys were conducted without the presence of the researcher and no unique identifiers were attached to the data or known to the researcher. In the case of observations, the participants were known to the researcher, but at no point during the study was their identity revealed.

The study is in alignment with the Protection of Personal Information Act (POPI) (2013) with regard to the confidentiality of all participants' personal information. The alignment is as a safeguard, since the researcher does not require that the participants provide any personal details throughout the study, but due to the fact that the participants are known to the researcher safeguards must be in place. The conditions identified in the POPI Act (2013) that the study/researcher commits to comply with are listed below:

Condition 7 – Security Safeguards

- Security measures on integrity and confidentiality of personal information: Section 19, including subsections (1), (2) and (3).
- Information processed by operator or persons acting under authority: Section 20.
- Security measures regarding information processed by operator: Section 21, including subsections (1) and (2).
- Notification of security compromises: Section 22, including subsections (1), (2), (3), (4), (5) and (6).

Within this study protection from harm does not refer to physical harm, but rather the protection of the participants from psychological harm such as the effects on self-esteem and academic confidence. Since participation was in part voluntary, participants could withdraw or decline to participate after the study had commenced. The study posed to be beneficial to the participants where strategies would be devised to foster their creativity and instil lifelong reflective practice.

Formal ethical approval from the relevant institutional committees was received. These included the Stellenbosch University (SU-HSD-004304) and the EGAF (see appendix 4). I undertook to conform to the principles and ethical standards set by the published Code of Ethics, American Educational Research Association, approved by the AERA council in February 2011 (AERA, 2011). The researcher ensured that all ethical procedures were followed throughout the duration of the study.

1.8 Chapter outline

This thesis consists of 5 Chapters, a brief outline for each chapter is provided below.

Chapter 1 – Orientation to the study

This chapter introduces the reader to the study, providing an overview of the research problem and defining the key terms. Details are provided with regards to the motivation and aims of the study, as well as the research design and methodology practiced. The limitations and ethical considerations pertaining to the study are covered.

Chapter 2 – Overview of relevant literature

A broad scope of relevant literature covering all key concepts in support of the action plan is documented.

Chapter 3 – Research Methodology

This chapter reveals the research paradigm and approach used in this study, and the implications thereof. The participant group is identified along with the data collection tools and the analysis of the datum. Ensuring the quality of the research is of focus.

Chapter 4 – Results and discussions

Detailed context and research procedures are provided, along with the analysis and findings of the various data collection sets.

Chapter 5 – Conclusions and possible implications

This chapter provides a summary of the main constructs of this study, while revisiting the research questions. Emphasis is brought to the relevance of the research for the field of context and continued learning. This chapter also includes a reflection of the researcher's own learning and possible implications in review of that reflection.

1.9 Conclusions

Chapter 1 has provided the reader with a detailed overview of the study. Introducing the research question and the context within which the study was conducted. The motivation for the study has led the researcher to an action research approach, placing the researcher in dual roles, one as educator/facilitator and the other researcher. The consequences of this dual role are addressed to ensure sound ethical research is conducted. The aims of the research are to explore, through an action research approach, how one can foster design students creativity through reflective practice, as well as ultimately improving personal practice and creating new knowledge. The key terms and subsidiary questions are explored further through the relevant literature in the upcoming chapter.

Chapter 2

Overview of relevant literature

2.1 Introduction

Fostering creativity is the catalyst for the inclusion of reflective practices within my teaching approach. The overview of relevant literature provided in this chapter serves to provide an account of the key concepts identified within this study, and how they might relate conceptually. Key concepts to be reviewed include: reflective practices, teaching for creativity, fostering creativity and design process, with the study set within a fashion design context.

2.2 Reflective practice

The following section focuses on understanding the concept of reflective practice, this understanding was applied to the inclusion of reflective activities within my teaching practice, with the aim of fostering creativity.

2.2.1 What is reflection?

One of the earliest cited definitions of reflection in education comes from John Dewey (1910), who believed that reflective thought was the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds which support it, and the further conclusions to which it tends. Dewey (1933) further suggests that the development of reflection involves the acquisition of certain attitudes such as open-mindedness and skills of thinking like reasoning and ordered thought. Reflection should be initiated by uncertainty and guided by one's goals.

The work of Habermas (1974) portrays the concept of reflection as a process of becoming aware of one's context, of the influence of societal and conceptual constraints on previously taken-for-granted practices and gaining control over these influences. From Dewey's initial definition and the process documented by Habermas and others, Boud, Keogh and Walker (1985) have described reflection as a learning process which begins with the totality of the learner's experiences, including their behaviour, ideas and feelings. The learner then engages in an intellectual affective process of evaluating those experiences, resulting in successful outcomes of reflection such as, the integration and appropriation of knowledge, validation of personal knowledge and a new emotional state or the decision to apply knowledge and to act. Osterman (1990) characterises reflective practice as a mindful consideration of one's actions, specifically one's professional actions and describes it as challenging, focused and a critical assessment of one's own behaviour as a means towards developing one's craftsmanship. Rowntree (1988) perhaps provides the clearest of definitions; he states that reflection is studying one's own methods as seriously as one studies the subject, thinking about the task after you have done it. Unless you do this, he says, the task will most certainly be wasted. In any learning situation, you should prepare for it before hand, participate actively during it, and reflect on it afterwards (Rowntree, 1988). Throughout the literature various types of reflection have been identified.

During the 1980s, Schön (1983, 1987) resurrected the role of reflection in practice and education. Schön (1983, 1987) identified two types of reflection, namely reflection-in-action and reflection-on-action. He described reflection-in-action as reflection that takes place while the practice or learning is taking place; and reflection-on-action as reflection that takes place after the practice or learning has concluded.

The framework of reflection outlined by Hatton and Smith (1995) identifies four types of reflection, namely: technical, descriptive, dialogic and critical. Technical reflection is defined as decision making about immediate behaviours or skills and is linked to practical learning tasks. Descriptive reflection is an analysis of one's performance, giving reasons for actions taken. Dialogic reflection is described as the action of hearing one's own voice, exploring alternative ways to solve problems. The final type of reflection, critical reflection, involves thinking about the effects upon others of one's actions, taking account of social, political or societal forces. It discovers new meaning and suggests how this experience can impact and inform the future (Hatton and Smith, 1995).

These definitions and explanations of the concept of reflective learning have helped me understand that the process, by which we define and solve problems, becomes the context of most learning. Thus reflection within the context of this study is defined as a mindful deliberation of one's actions, critically assessing one's own behaviours, while developing an awareness of one's context as a means towards developing one's craftsmanship, work process and creativity, all the while being guided by predetermined personal goals.

2.2.2 Can reflection be taught?

The literature does not dispute that one can teach or be taught to reflect in order to promote deep learning, but it does identify why reflective practices are often avoided or unsuccessful within higher education. Johns (1994) argues that practitioners and learners do not recognise the significance of their own personal knowledge and only value research-based knowledge. He also expresses concerns regarding the attitudes and perceptions of the practitioners who participate in the reflective process, causing them to limit their answers to cue questions without providing a holistic view. Johns (1994) believes that most learners and practitioners would prefer to stick to routine practice than face the effort of curiosity, reflection and commitment. Time (or a lack thereof) has also been identified as a reason why reflection is not being effectively practiced. This, along with the size of higher education classes, limits the opportunity for reflective thinking. Additionally, the diverse understanding of the term reflection, and how it can be recognised and documented, also hampers the reflective process (Barak, 2006; Laughran, 1996).

Much has been written on how facilitators can promote reflection within their teaching and learning, thereby teaching learners how to reflect, as well as learn through reflection. These practices and activities will be discussed in the upcoming sections.

2.2.3 How to foster and promote reflection

Many educators assume students are reflective thinkers and students are often told to reflect with this assumption in mind. Boud, Keogh and Walker (1985) argue that because the activity of reflection is so familiar to educators, we often overlook it in formal learning settings and make assumptions that not only is it occurring, but that it is occurring effectively for everyone in the group. Therefore it is essential that before learners are instructed to reflect critically on their actions, they are taught what reflective thinking is, how it aids the learning process, how reflection can be conducted and documented, as well as the benefits or outcomes of reflective practice (Moon, 1999).

The facilitator should carefully plan lessons to include time for reflective practice, as well as setting tasks which promote reflective thinking. In terms of providing an optimal learning environment for promoting reflection, Stample and Oliver (2007) have developed a framework illustrating the elements in the learning environment that facilitate reflection and learning. This framework can be viewed in Figure 2.1 below.

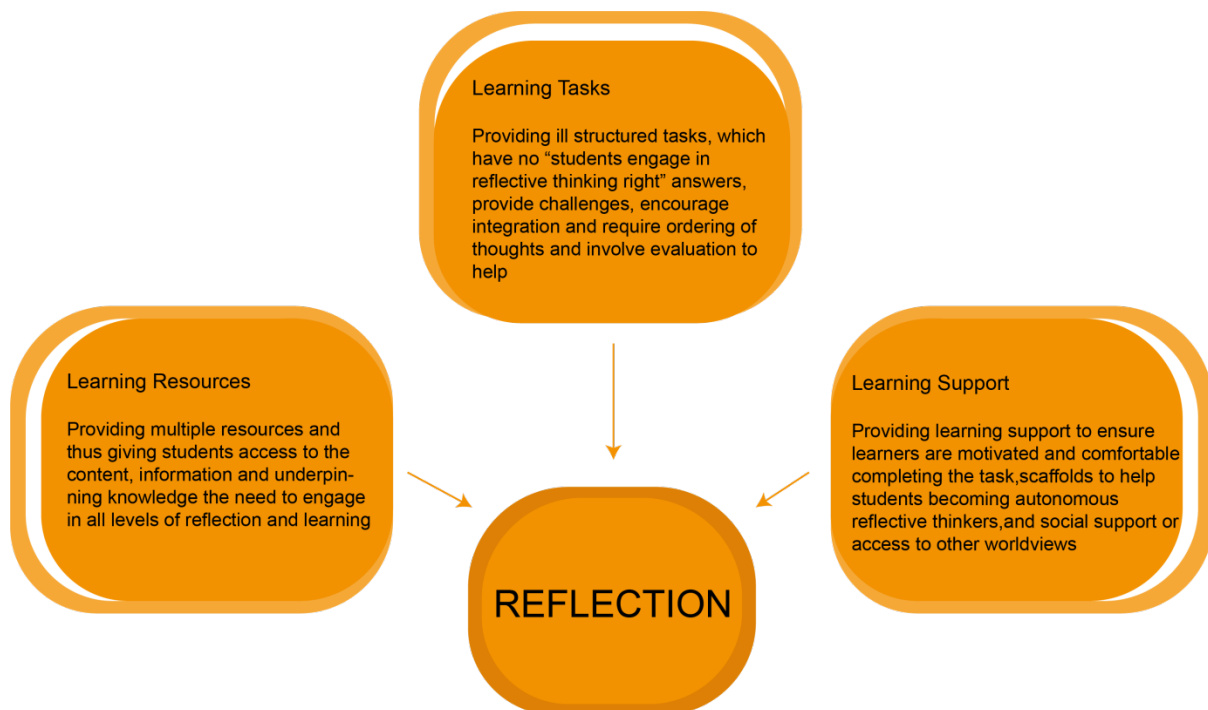


Figure 2.1: Elements of a learning environment promoting reflection (adapted from Stample and Oliver, 2007, p. 979)

The framework highlights that providing engaging tasks gives reason to participate in the various stages of cognitive processing and levels of reflection. Giving different forms of support helps students complete the task and encourages them to become autonomous learners, and giving learners' access to multiple resources allows contact with content, information, and the underpinning knowledge they need to fully engage in reflective thinking (Stample and Oliver, 2007). The elements suggested in Stample and Oliver's (2007) framework are validated and supported by numerous authors (Moon, 1999; Oliver and Herrington, 2001; Etkina, Mestre and O'Donnell, 2005). The framework is further discussed

in the section below, focusing on the opinions of the afore mentioned authors, providing clarity on the elements suggested in Figure 2.1.

2.2.3.1 Learning tasks

Moon (1999) suggests that tasks exhibiting characteristics that promote analysis, synthesis and reasoning will promote reflective thinking. These tasks should ask the right kind of questions, set challenges, encourage learners to integrate new learning with previous learning and should involve evaluation. Examples of such learning activities may include: writing and rewriting (Moon, 2005), role play (Roberts, 2002), reflective discussions (Mezirow, 1990) and group work (Wiley, Sanchez and Moher, 2005).

2.2.3.2 Learning support

Oliver and Herrington (2001) describe learning support as the means by which learners are given feedback and guidance and their contribution to learning is encouraged and strengthened. Support can be offered in various forms such as cognitive support, where the facilitator encourages the learner to fully engage in the learning task by creating an environment which fosters proper attitudes and motivation (Boud, Keogh and Walker, 1985). Facilitators can also create an environment where learners have the opportunity to be listened to, as well as listening to others, fostering the desire to hear diverse perspectives, and consider all facts. Maintaining curiosity through motivation and thus enticing them to venture through the stages of the learning process with open mindedness will promote reflective practices and hence deep learning (Etkina, Mestre and O'Donnell, 2005). Finally Moon (1999) adds that learners may be more motivated to fully engage in their learning if they know it is to be graded.

Oliver and Harrington (2001) also speak of learning support in the form of scaffolding, which refers to the support of peers, parents and facilitators, while engaging in a learning task. This scaffolding support can come in the form of the facilitator modelling reflective behaviour through: discussion or timely feedback and coaching, encouraging the learners to verbalise their learning process, and promoting a supportive non-judgemental environment where students can identify areas of uncertainty that they can communicate to aid their learning.

Social support is important, because although the learners often reflect individually through writing or verbal dialogue with themselves, only when they are encouraged to share and communicate with others, and begin to see things in context, will they have a better chance of challenging their assumptions and ultimately apply new understandings (Brookbank and Mc-Gill, 1998).

2.2.3.3 Learning Resources

Boud, Keogh and Walker (1985) indicate that reflective practice is fostered when students are given access to multiple world views. In Oliver and Herrington's (2001) framework learning resources is one of the three elements of an effective learning environment. The learning resources offer the content, information and underpinning knowledge the students need to engage in all the levels of reflection. By

providing resources, facilitators help students deal with large amounts of information and make meaning of it (Oliver and Herrington, 2001).

In conclusion, educators should not assume reflection is taking place and should plan and facilitate reflection as a learning tool structured within their lesson plans. Careful consideration should be taken with regard to the learning tasks set, the learning resources available, as well as the learning support provided in order to aid in the successful facilitation of reflection, as addressed in the following section.

2.2.4 Facilitating reflection

Reflective thinking is a learned process that requires time. Facilitators should therefore never assume that successful reflective practices are taking place. Reflective exercises or practices should be guided and planned, allowing time within the scheduled classes for these exercises to take place (McClure, 2005). It is also important that a safe, comfortable environment be created where learners are at ease sharing and developing solutions without any forms of intimidation or prejudice to influence the process (Brookbank and McGill, 1998; Mezirow, 1990).

Facilitators can guide learners to reflect critically by ensuring that the learners are knowledgeable on the reflective process, the types of reflection which could take place as well as the correct questions to ask to enhance critical reflection. Ensuring that the learners understand the outcomes of reflection will motivate them as they will realise the value of practicing reflection. The model shown below in Figure 2.2 indicates the process to be followed in order to achieve guided critical reflection.



Figure 2.2: Process of guided reflection (adapted from Boud, Keogh and Walker, 1985, pp. 18-40)

This process of guided reflection is the basis of action research, which when repeated, tests the action plan developed and documents the success thereof through observation and further reflection. Action research is further discussed in Chapter 3.

It is important to remember that reflective writing is just a means of documenting the reflection; it is the thinking process that is important. Facilitators should plan and conduct learning opportunities which allow for reflective thinking to take place, moving beyond descriptive reflection. This could be achieved by paired reviews, group discussions or one-on-one facilitator feedback sessions (Danaghy and Morss, 2000). Written reflection is often in the form of a reflective diary or journal, or can be documented in a reflective essay. The reflective diary is a private record of experiences throughout the learning experience; only by reporting personal feelings following an event can experiences be built upon and improved. Facilitators can guide this process by suggesting the following questions be considered when reflecting (as suggested by Allin and Turnock, 2007):

- What was I aiming for when I did that?
- What exactly did I do?
- Why did I choose that particular action?
- What theories/models/research informed my actions?
- What was I trying to achieve?
- What did I do next?
- What were the reasons for doing that?
- How successful was it?
- What criteria am I using to judge success?
- What alternatives were there?
- Could I have dealt with the situation any better?
- How would I do it differently next time?
- What sense can I make of this in the light of my past experiences?
- Has this changed the way in which I will do things in the future?

Large student numbers are often noted as an obstacle for learning facilitators when it comes to reflective practices, but Sims and Bovard (2004) suggest that facilitators should embrace the use of technology and add that if implemented properly it can be very advantageous. Some of these advantages include: access to resources, communication with peers and experts, safe space for interactions and personal thoughts, and “anytime, anywhere” learning (Borak, 2006, p. 135).

To conclude, educators are advised to facilitate reflection by following a guided reflective process, implementing appropriate practices and asking appropriate questions to stimulate critical reflection. How one would go about assessing the success of these practices is the next challenge faced by educators.

2.2.5 Assessment of reflective practices

The literature (Johns, 1994; Moon, 1999) has been supportive of the notion that reflection is a mode of thinking and with the right set of conditions, guidance, knowledge and opportunity, reflection can be taught. If taught, how then does one assess the reflective practices of a student to determine if deep learning has taken place? Zeichner (1987) points out that it is difficult to assess the effects which any particular approach to reflection might produce, but that it is not impossible.

Boud, Keogh and Walker (1985) include a list of possible outcomes of reflection within their reflective learning model. It is possible to measure the students' learning against assessment criteria linked to the outcomes. The outcomes set include: synthesis, integration and appropriation of knowledge, validation of personal knowledge, achieving a new emotional state, and the decision to apply knowledge and to act on it.

Schroeder (2014) suggests that learners could be asked to respond to a specific set of questions at the beginning of the reflective process and then again at the end of the process. A comparison of the responses would indicate whether the reflective process was effective or not. The production of portfolios of evidence along with supportive reflective documentation is also an effective form of assessing reflection (Allin and Turnock, 2007).

Reflective learning has been written about extensively and so it is not a new concept to education. The challenges within contemporary education include facilitating effective reflective learning, or producing learners who can think critically. The contemporary literature cited here, which builds on previous seminal work, offer solutions and strategies which facilitators of reflective learning can implement. If learners understand the concept of reflection and are guided through the process, they will reap the benefits of deep learning and critical thinking.

2.3 Fostering creativity

2.3.1 Can creativity be taught?

The notion of creativity was defined in Chapter 1, Section 1.4.1. This understanding of creativity enables us to think of creativity in education as something that can be taught or promoted, along with training programmes to stimulate individuals' creativity (Lin, 2011). Brainstorming techniques developed by Fryer (1996), along with creative teaching practices (Craft, 2000) that involve the opportunity for exploring and problem solving, creating an environment that is stimulating and supportive to learners (Hennessey, 1995), and developing a teaching ethos concerned with nurturing creativity and valuing independent thought (as opposed to being authoritarian according to Craft, 2000 and Hennessey, 1995) have all been explored.

I have been teaching creativity and implementing creative teaching methods for many years within the fashion design context, but have come to the question, how is promoting creativity in the classroom

distinct from good teaching? I have concluded from the literature that a shift from teaching creatively to teaching for creativity is necessary in order to successfully foster creativity within the fashion design process (Jeffery and Craft, 2004; Rutland and Barlex, 2008). A distinction can be made between teaching creatively and teaching for creativity. Teaching creatively is using imaginative approaches to make learning more interesting and effective, while teaching for creativity is focused on identifying students' creative abilities, as well as encouraging and providing opportunities for the development of those abilities (Jeffery and Craft, 2004). Teaching for creativity not only focuses on the creative methods and strategies facilitators are implementing, but on developing a person's creative thinking and abilities, shifting the focus from the teacher to the learner, contributing to self-directed learning through reflection (Owens, 2007), in an inclusive approach (Jeffery and Craft, 2004). Mezirow (1985) supports this approach by stating that self-directed learning is realized when external activities and internal reflective dimensions are fused.

In Lin's (2011) model shown below in Figure 2.3, the three elements of creative pedagogy are used in support of one another to arouse curiosity and learning motivation. Lin (2011) states that the practices are interrelated, and both support and complement one another in the aims of promoting creativity. The three elements include creative teaching, teaching for creativity and creative learning. Creative learning is in opposition to learning by authority, being told what is to be learned. Creative learning allows the learner to creatively direct their learning (Torrance, 1963).

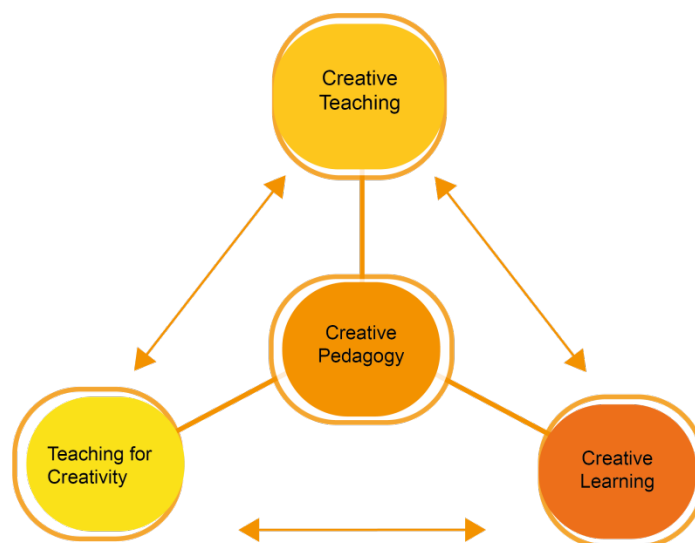


Figure 2.3: The three elements of creative pedagogy (adapted from Lin, 2011, p. 152)

In more recent studies conducted on the integration of creative teaching methods, teaching for creativity and creative learning, several features are revealed, including: playfulness, collaboration, development of imagination, and possibility thinking (Kangas, 2010; Crompton, 2011). These features imply that the interaction between the creative endeavours of teachers and learners foster creativity.

Jeffery and Craft (2004) suggest that teaching for creativity is more likely to happen when teachers are teaching creatively. It has been established that teachers practicing creativity in the classroom promotes learners' creativity (Cropley, 2002). The literature further suggests that teaching for creativity has three defining facets, encouraging, identifying, and fostering (Jeffery and Craft, 2004). *Encouraging* focuses on establishing a classroom environment and student attitudes that support creativity. *Identifying* relates to helping students discover and ascertain their own creative strength, while *fostering* is providing opportunities for students to develop their creativity authentically within the design process. Two additional facets – developing self-evaluation and ownership of learning – were later included as facets that are important to the concept of teaching for creativity (Anderson et al., 2005).

This study focused on fostering authentic creativity within a fashion design process through reflective practices. The reflective practices developed and implemented were designed to achieve the facets defining teaching for creativity. These reflective practices in conjunction with creative teaching methods and the encouragement of creative learning were aimed at fostering creativity in fashion design students.

2.3.2 Can reflection promote creativity within a design process?

Reflection as a tool to foster creativity has been widely researched in recent years (Lawson, 2005; Ryan and Ryan, 2010; Freedman, 2010), with the majority of the authors highlighting the benefits of reflective practices for student designers exploring their creative abilities, as well as the lifelong benefits embedded reflective practices have for established, practicing designers.

The ability to critically reflect on processes, techniques and design outcomes is a pivotal element in the design process and forms a cornerstone for good design practice. This is echoed throughout the literature, with Lawson (2005) arguing that if a designer fails to appropriately reflect on and during their design process it can lead to a failure to explore important design avenues and in turn limits their creativity.

Freedman (2010) states that creativity is reflective and that designers should use reflection to uncover and alter the limitations of their practice. The use of dialogical methods of reflection and self-reflective thinking are encouraged in the design process (Kizel, 2012). This will enable the designer or design student, in this case, not only to understand their role on the design process, but will promote their creativity simultaneously. This sentiment is supported by Sengers, Boehner, David and Kaye (2005) who stress that reflection is a core principle in the design process. They go on to express that reflection should not be a separate activity from action, but should be folded into it as an integral part of the experience. The dialogical engagement between the designer and the users/client will not only enhance the reflective process but will in turn promote creativity.

The human encounter is an all important dimension in the design process and is an enquiry that delivers self-understanding and the promotion of creative thought. Schön (1987) describes reflection as a set of

activities that designers consciously or subconsciously engage in, to get a better understanding of the design problem and repeatedly testing this problem. This repeated problem framing and hypothesizing aids the creative practice, thus playing a critical role in creative design, helping designers in problem formulation, ideas generation and self-evaluation (Sharmin and Bailey, 2011). This action is supported by Lowy (2001) who states that reflection within the design process to evoke self-awareness, self-direction and further promote and develop creativity is as vital as reflecting on the end product. Embedding reflective activities in the design process will foster creativity (Allen and Evans, 2012; Ryan and Brough, 2012).

In their study, *I reflect to improve my design – Investigating the role and process of reflection in creative design*, Sharmin and Bailey (2011) concur that reflection is an integral part of the creative design process. They emphasize the importance of reflecting during and on the design process, to identify unconscious aspects of the design problem and to rethink dominant design choices. The findings of the study indicate that through intentionally practiced reflection, creativity is fostered, due to the designers recalling design decisions, assessing their design process, developing an understanding of the context, comparing different projects, eliminating creative block, assessing their growth as a designer and estimating effort invested over productivity and cost.

It is clear that if implemented and practiced correctly, reflection can promote creativity within a design process and more specifically within a fashion design process. I will now explore how to effectively facilitate the fostering of creativity through reflective practices.

2.3.3 Fostering creativity in the design process through reflection

It has already been established that for reflection to be an effective learning tool, it should be well thought out and planned by the facilitator. Facilitators should never assume that successful reflective practices are taking place and should ensure that learners fully understand the concept of reflection and how it can benefit their learning. Reflective exercises or practices should be guided and planned, allowing time within the scheduled classes for it to take place (McClure, 2005). It is also important that a safe, comfortable environment be created where learners are at ease sharing and developing solutions, without any forms of intimidation or prejudice to influence the process (Mezirow, 1990).

With a focus on fostering creativity in the initial conceptual stages of the design process through reflection, Ryan and Ryan (2010), propose a strategic approach of embedding appropriate reflective teaching activities into the design process or design classes. The design process essentially involves three phases, namely: analysis, synthesis and evaluation (Au, Tailor and Newton, 2004). These phases are essential in the initial conceptual stages of the design process. The conceptual stage involves researching and developing a conceived design concept and creating visual representation of the conceived design concept. Purposeful reflection during each phase will foster creativity and authenticity (De Wet and Tselepis, 2015).

The fashion design process practiced at the EGAF is sub-divided into a cyclical sequence of interrelated activities, with each activity being performed to produce a specific result or deliverable in the process (Burke, 2011). The process can be viewed in Figure 2.4.

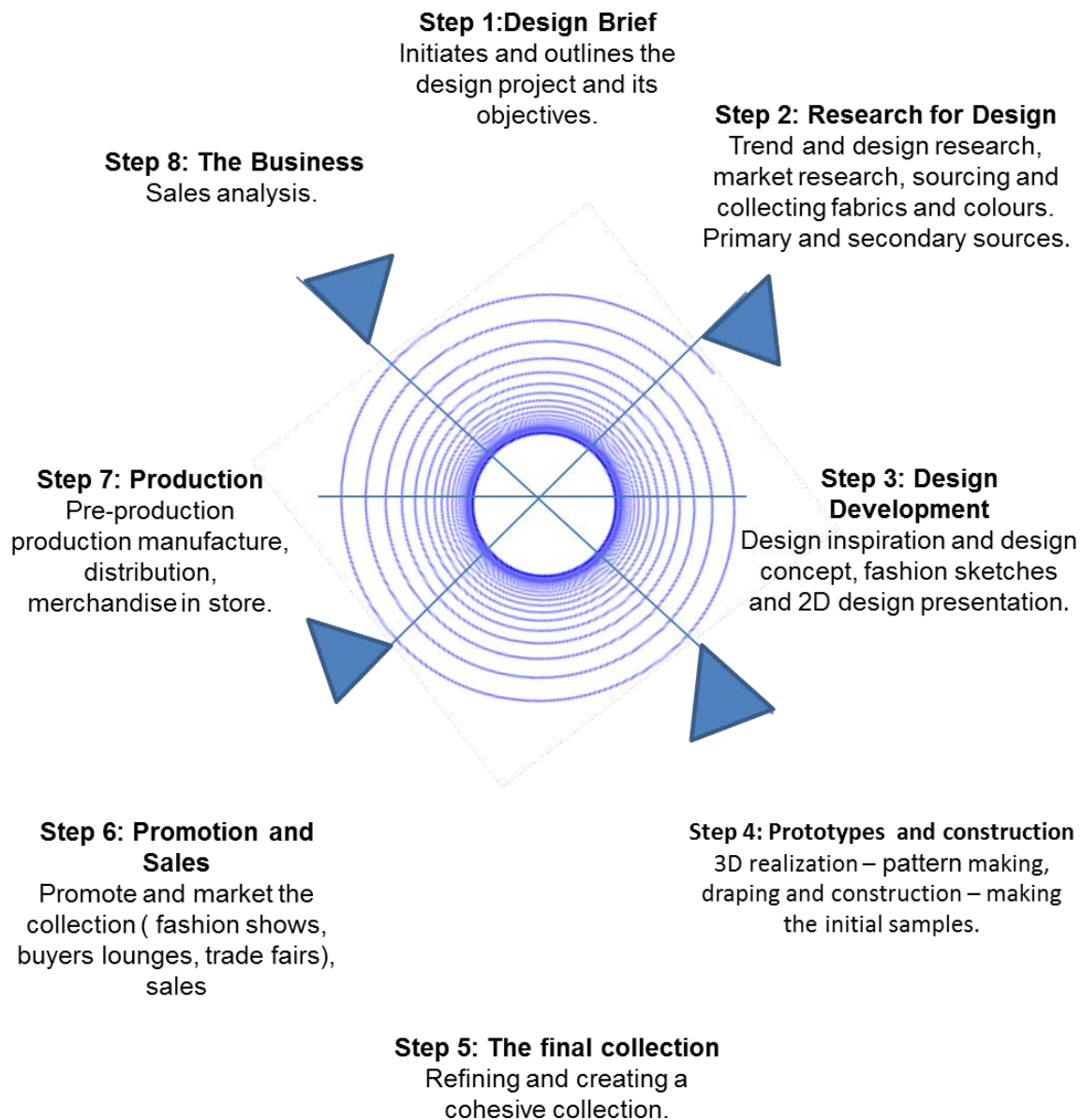


Figure 2.4: Fashion design process (based on Burke, 2011, p. 15)

The fashion design process shows the sub-division of the design process as a sequence of eight logical steps presented as an interactive cycle. This study is focused on the initial conceptual stages of the fashion design process, represented in steps one to three in Figure 2.4 shown above. These steps include:

- step 1 – the design brief, which initiates the design project, outlining the design specifications and objectives;

- step 2 – research for design, where students are expected to conduct both primary and secondary research on; conceptual ideas, trend, design and market research, as well as sourcing and selecting suitable fabrics and trims; and
- step 3 – design development includes design inspiration and design concepts, fashion sketches of design ideas, experimentation of various techniques, as well as two dimensional design presentations representing the design concept (Burke, 2011).

The following section will focus on reflective activities which could be implemented into the initial conceptual stages of the fashion design process to promote creativity. Although reflective practice is a norm in the fashion design industry, in academic fashion studies teaching of and with reflective practices is an area of limited discussion. Authors such as James (2007), McDonald and Bigelow (2010), Sharmin and Bailey (2011), Allen and Evans (2012), and Murray and Lafrenz (2016) have identified practices best suited for fashion design students to be used in the design process or in a holistic manner. The reflective activities embedded into the facilitation of the initial conceptual stages of the design process to foster creativity could include one or more of the following activities.

Written reflections are the most common form of recording one's reflections, in the form of essays or journal entries, and although written reflections can be beneficial in promoting creativity, James (2007) states that written reflections are not necessarily best suited for the fashion design student and that non-traditional academic format, such as visual journaling, videos and blogging could be adopted, in conjunction with written reflections or independently.

Ryan and Brough (2012) indicate that the engagement of reflection in the design process should be introspective and questioning of action, with designers often using tacit reflection. This is the natural thought process that critical thinking designers deal with throughout the design process, but for educational purposes designers are guided to record or document these tacit reflections. Here the facilitator could play a pivotal role in providing an interactive, one-on-one, non-judgemental and supportive critique of the student's concepts and ideas to secure critical reflection, as well as guiding the student on how to best document these reflections. As part of the design process fashion design students are required to develop a hand written tactile design journal or visual diary, with supportive imagery and drawings. The journals serve as a possible portfolio of evidence, a document for recording reflective thoughts, as well as becoming a tool or artefact to aid in the engagement of reflective conversations or evaluations.

A study was conducted by Ryan and Brough (2012) on the effectiveness of publicly blogging various stages of the design process in a reflective format. This non-traditional academic format of reflection made use of images, video, audio and text in a very casual way, which resulted in very open and honest dialogue. The use of a private hard copy journal in conjunction with the blog alleviated any issues students had with privacy.

During the early stages of the design process, a design idea is conceptualized by drawing on inspiration; this inspiration is presented in the form of images, drawings and text in the form of a mood or concept board. De Wet and Tselepis (2015) explain the importance of image reflection during the planning and layout of these concept boards. The images selected should evoke emotions in the designer, which best interprets the design concept, and the aim of the concept board is then to evoke the same emotion in the viewer of the board, hereby grasping the design concept in full. Questioning the relevance and appropriateness of each image, font type, as well as the overall layout plan should be reflected on.

The importance of artefact reflection in the fashion design process is highlighted by Sharmin and Bailey (2011), as well as Ryan and Brough (2012). This could take place at the end of each step in the fashion design process, since each step results in a deliverable, be it a visual journal, a mood board, a set of technical drawings, a prototype or a final garment. Sharmin and Bailey (2011) further add that artefacts are an integral part of design reflection and novel representation of artefacts and visual summaries of design concepts and activities are imperative in supporting reflection and fostering creativity.

Allen and Evans (2012) study, *Going beyond the obvious: Engaging fashion design and fashion communication students in reflection a self-motivated investigation*, hinges on the characteristics of the so-called google generation and in particular their use of technology. They suggest that facilitators become flexible and explore effective ways in which to incorporate technology into reflective learning. *WhatsApp* groups could be created to encourage students to share their daily reflections with their peers. *Pinterest* boards could become their digital visual diaries. Primary research could be documented as photographs. All these activities encourage dialogue and interaction, opening up a channel for feedback on investigation, which will provide food for thought and in turn critical reflection.

Other reflective activities identified as being beneficial to fashion design students include peer discussions (James, 2007), focus groups (Schön, 1987), and self-evaluation (Lowy, 2001). These activities, if practiced effectively will become lifelong tools which the fashion design student could use to reflect and further promote their creativity beyond graduation.

2.4 Conclusion

In conclusion, the cited literature provides evidence that if appropriate reflective practices are successfully embedded into the lesson or design process of a fashion design student, and provided that the student is educated and guided on the reflective process and the values thereof, student creativity can be fostered. Teaching for creativity as opposed to teaching creatively is an advised strategy to adopt as this will aid in the promotion of creativity. The strategies for teaching for creativity, as well as a guided reflective plan embedded into the design process of the fashion design project or task will best promote creativity within fashion design students.

Chapter 3

Research methodology

3.1 Introduction

The aim of this study was to explore how to foster design students' creativity through reflective practices. The concept was developed after reviewing the observations of my own practice, documented as purposeful reflections during the 2016 academic year. This aim would, in turn, enhance my professional practice. This chapter is dedicated to discussing the research paradigm and the research methodology selected to conduct the study. The sample group selected is documented, as well as the data collection procedure and the analysis thereof, concluding with the approaches used to ensure the quality of the research.

3.2 Choice of research paradigm and approach

This study was conducted in a critical paradigm. The critical paradigm places emphasis on participation, involvement, collaboration and engagement, with the researcher and the subject becoming equally involved in the research process (Henning, Van Rensburg & Smit, 2004). The belief that complex practical problems demand specific solutions, which can only be developed in the context which the problem arises, led me to an action research methodology.

3.3 Choice of research methodology

3.3.1 Action research

An action research methodology involves using a reflective lens through which to investigate one's own facilitation practice, identifying pedagogical issues and methodically working out an action plan to deal with that issue. Action research is twofold; improving one's practice through change, as well as improving some aspect of the students learning experience (Norton, 2009; McNiff, 2014). This involves systematic action reflection cycles of expressing concerns, producing action plans, acting and gathering data and evaluating the effectiveness of changing practice. My personal reflective activities, conducted within my teaching practice are aligned with the subject content of this study and aid in valid data collection as demonstrated in Chapter 4.

3.3.2 Implications of following an action research approach

An action research approach has certain implications for myself/the researcher; the participants and the social context in which the study takes place (McNiff, 2002). Since action research in education is primarily to improve personal practice the researcher plays an integral part, not only in providing personal credibility to the study, but having to face the dual role of facilitator and researcher. This in turn poses many ethical challenges, which needs to be addressed accordingly. The ethical considerations for this study have been appropriately addressed in Chapter 1.

Participatory action research is typically conducted at the institution which the researcher is practicing, acquiring the support and co-operation of the institution to conduct the research is imperative. The context of the study must reflect the context of the problem and the participants must form part of the social context of the problem. The study hinges on the active participation of the limited sample group (McNiff & Whitehead, 2005). The issue of prejudice on my part must be addressed early in the study to reassure participants concerns and ensure they feel open to expressing their ideas and experiences (Norton, 2014).

Since action research is a cyclical practice and new practices are often embedded into the lesson plans of the researcher/facilitator, advanced planning within the often restricted time frames of the institutions academic calendar must be implemented. Time must be available for me to implement the action cycle at least twice for sound findings to be achieved (Norton, 2014). The characteristics of action research highlighted by Norton (2014) were all considered and applied to the planning of this action research study, in an attempt to produce quality research and sound findings.

3.4 Target population and sampling

The first sample group were purposefully selected and consists of twenty, third-year fashion design students, who were all registered for the level 3 Design modules in 2017, and who completed their second year of study in 2016 at the EGAF, having had the design component facilitated by myself, the researcher. All of the students in the sample group were known to me within the context of fashion design education. None of the participants were known to me in any other context. The relationship I had built with the participants was strictly professional, in my role as facilitator and theirs, students of design. All the participants were over the age of 18 years and were therefore able to sign informed consent to participate in the study, had they chosen to do so. The validity of this sample group is based on their involvement in the design classes which I am facilitating, sex, race and age were not factors I took into account when observing and collecting data.

The second sample group consisted of four experienced colleagues. The sample group played the role of a colleague validation group throughout my study. All the colleagues selected were either of equal status or held a higher status than me within the staff hierarchy at the EGAF. The sample group consisted of the academy executive director, the academic director, the head of quality assurance, as well as the head of the production department. All the participants were experienced in both the academic field of fashion design education, as well as the design field in general. My relationship with the participants was one of mutual respect. This validation group monitored and aided in guiding the study, as well as validated any observations and findings I present in the next chapter.

3.5 Data collection and analysis

The study was conducted over two action research cycles as indicated in the research procedure cyclical model shown in Figure 3.1 below.

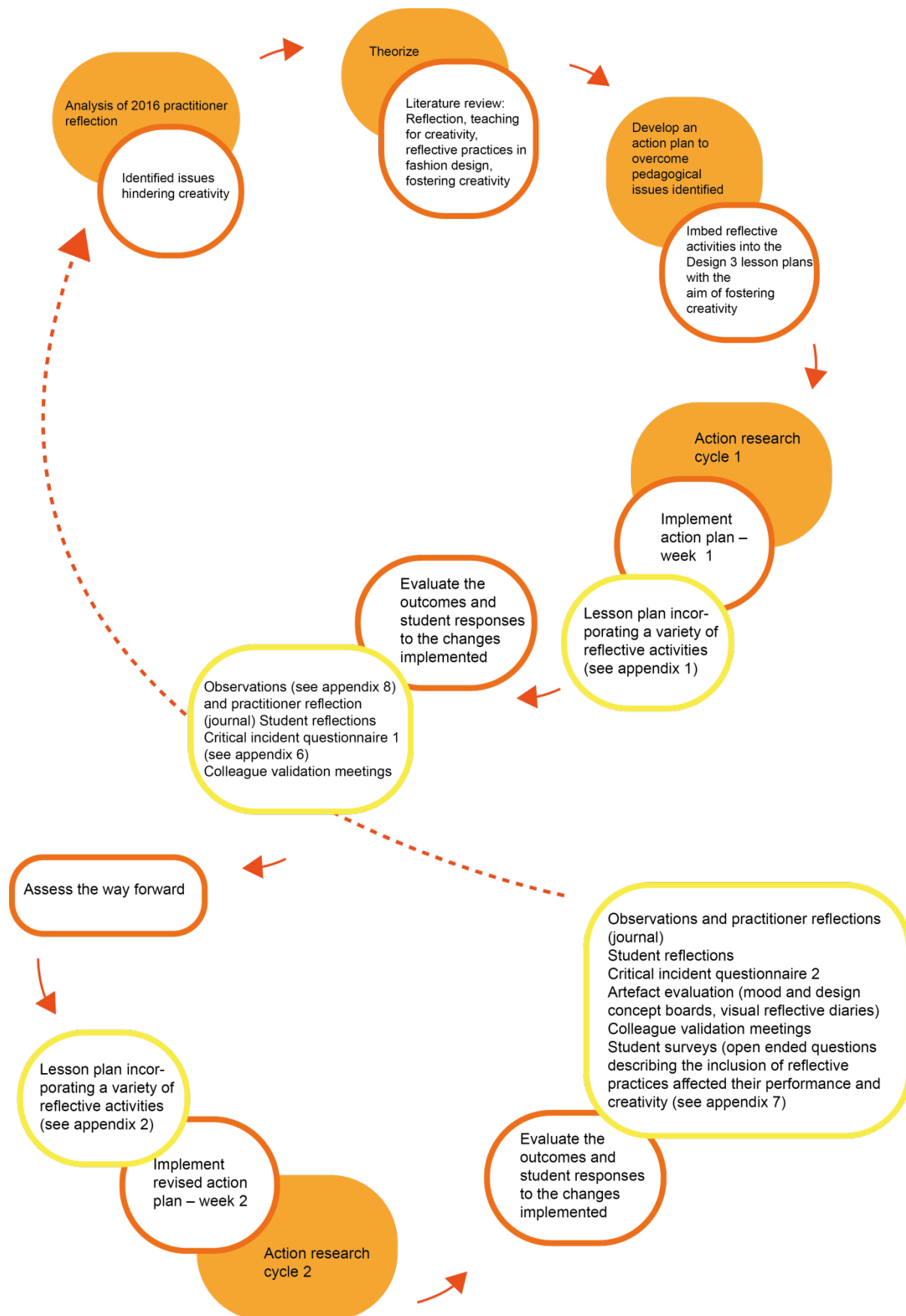


Figure 3.1: Research procedure cyclical model

The data was collected through practitioner observations of the students participating in prescribed reflective practices and was recorded in a reflective journal. Student reflections documented during the reflective exercises were also analysed. A critical incident questionnaire was distributed to the student sample group at the end of each action research cycle, and a survey consisting of two open-ended questions aimed at determining the students' perspective of the effectiveness of reflection on their performance and creativity was conducted at the end of the second action research cycle. Artefacts, consisting of the students' self-expressive fashion design portfolios, were used in an artefact evaluation to assess the creativity evident in the students' work after having practiced reflection.

According to Merriam (1998), the analysis and interpretation of the findings reflect the constructs, concepts, language, models and theories that structured the study in the first place. Therefore, due to the nature of the study I applied an inductive framework, allowing the findings to emerge gradually from the data (Hsieh and Shannon, 2005), while following a conventional qualitative content analysis approach to analyse the data. Content analysis is defined as an analytical approach for the subjective interpretation of the content of text data through the systematic process of coding and identifying themes and patterns (Hsieh and Shannon, 2005; Norton, 2009). Analysis is thus the search for patterns in the data and for ideas that help explain why those patterns are there, and coding is a method that enables you to organize and group similarly coded data into categories and eventually patterns. Coding is the critical link between data collection and their explanation of meaning (Saldana, 2009). The conventional content analysis approach is appropriate when existing literature on the problem at hand is limited, eliminating the use of preconceived categories developed from either the theory or the researcher, instead allowing the data categories to flow directly from the data, also described as inductive category development (Mayring, 2000).

Due to the constructs of the study, and in light of the research question I conducted solo analysis and interpretation of the data (McNiff and Whitehead, 2005). Furthermore, I had a clear understanding of what was desired to be achieved in my practice and with my students. The data that was analysed stemmed from my observations recorded in my practitioner reflective diary and questionnaires, as well as critical input from focused colleague validation groups. The analysis of the artefact or visual design produced by the participants was also included at the end of the second action research cycle; the analysis thereof is discussed later in this section.

The primary focus for the data analysis was to determine how design students' creativity could be fostered through reflective practice. The data analysis was also guided by Bogdan and Biklen (2007), who indicate the advantages of two approaches to data analysis, one being, analysis in the field and the other analysis after data collection. This study engages both approaches. In the first action research cycle, analysis in the field was conducted, using conventional content analysis to decode and encode the observations of the actions implemented in the first cycle, which were reflectively recorded in my reflective journal. The aspects discovered aided in planning the second cycle of action.

The data collected in the second action research cycle was analysed after the process was completed. The data generated in the second action research cycle included once again my reflective observations as the researcher, input from the colleague validation group, and questionnaires completed by the participants. The triangulation of these sets of data after coding and analysis aids in the production of defensible research findings.

The design project and related lesson plan into which I had embedded the reflective activities resulted in the participants producing visual design concept boards, in the form of visual research diaries, mood or concept boards, concept design boards, and final design presentation boards. These boards visually present their creative design process and final creative design product. The analysis of these boards hinges on a comparative analysis of previously designed boards produced by the participants; these boards would have been produced in 2016, under my facilitation as lecturer. My professional integrity, qualification and lengthy experience in creative design education and assessment adds credibility to the findings of this comparative analysis. Colleague validation of the findings and in-depth comparative discussions of the participants' work, aid in validating the approach and ultimately the findings.

The drawing together of the data sets allowed me to formulate clear and definitive findings in relation to the research questions, which are presented in chapter 1.

3.6 Ensuring quality of the research

3.6.1 Trustworthiness

The trustworthiness of a study is practiced to support the argument that the enquiry's findings are worth paying attention to, and aim to show validity, soundness and significance. In the pursuit of trustworthiness in this study, I have corresponded with Guba's (1981) criteria set out to achieve quality research and trustworthiness in the readers. This set of criteria; credibility, transferability, dependability and confirmability among others are discussed below.

3.6.2 Credibility

Credibility refers to the attempt of the researcher to present a true picture of the phenomenon under investigation, as well as ensuring that the study measures or tests what is actually intended (Shenton, 2004), in this case, how the introduction of reflective practices into the lessons of fashion design students could foster creativity. Lincoln and Guba (1985) argue that credibility is one of the most important factors in establishing trustworthiness and have indicated a list of provisions to ensure credibility, some of which have been used in this study to promote accuracy, see these provisions, and how they have been applied to this study, discussed below:

- *Adoption of well-established research methods.* An action research methodology was adopted for this study. It is synonymous with practitioner research and mimics the reflective process I personally practice (Norton, 2009), which is the basis for this study. Data collection tools utilised are typical of an action research approach and are validated in the literature (Sagar, 2005; McNiff, 2014; Norton, 2014). An inductive framework, following a conventional content

analysis approach was adopted to analyse the data, these approaches are well established in action research (Hsieh and Shannon, 2005; Norton, 2009).

- *Triangulation.* Using different methods of data collection, namely; observations documented as reflective writings, questionnaires and focus groups in the form of colleague validation sessions were conducted. The distinct characteristics of each method provided unique sets of data that aided in ensuring credibility.
- *Tactics to help ensure honesty in informants when contributing data.* Participants were informed that participating in the data collection was voluntary and that they had the right to withdraw from the study at any point without reason or prejudice from the researcher. They were also informed that even though they are known to the researcher, all questionnaires completed for the study would be done so anonymously. The participants were also made aware that there are no right or wrong answers and that they could therefore contribute ideas and talk of their experiences without fear of prejudice from the researcher. These and other ethical issues are further discussed in Chapter 1.
- *Frequent debriefing sessions.* Debriefing sessions took place on a regular basis throughout this study in the form of colleague validation group meetings. The frequency of the meetings and outcomes are documented in Chapter 4. These discussions provided a sounding board for me to test new ideas and interpretations, draw attention to flaws in the cause of action, as well as help me recognise my own bias and preferences. The experiences and perceptions of the contributor of this group were recognised through discussion, ultimately widening my vision and promoting my confidence to pursue matters further.
- *Peer scrutiny of the research project.* The scrutiny of the research and written drafts of each section was welcomed. Regular scrutiny was conducted during the colleague validation group meetings, bringing fresh perspectives, as well as academic scrutiny by myself as researcher, aiding in refining my methods and strengthening my arguments in light of the feedback received.
- *Background, qualifications and experience of the researcher.* According to Patton (1990, in Shenton, 2004) the credibility of the researcher is especially important in action research as it is the person who is the major instrument of data collection and analysis. I am the head of the Design Department and senior lecturer at the EGAF and have been lecturing for 15 years in the field of design. I have been involved with five (5) separate design institutions over the course of my 15 years of lecturing, and I am a dedicated reflective practitioner, constantly critiquing my own practice with the aim of improved practice and personal growth. I also hold a formal qualification in both fashion design and post school education.
- *Member checks.* Emerging theories and inferences that I formed after observations or data collection were verified by the colleague validation group in this study.
- *Thick descriptions of the phenomenon under exploration.* A detailed description conveying the actual situations that have been investigated and the contexts that surround them is an important provision for promoting credibility. A detailed description of the context of the study

is provided in Chapter 1 of this report and is accompanied by a detailed description of the data collection situation in Chapter 4.

3.6.3 Prolonged engagement

Prolonged engagement involves the development of trust between the researcher and the participants, as well as between the researcher and the institution hosting the study/participants. Developing relationships prior to the study is advantageous to all parties involved in the study (Lincoln and Guba, 1985). In this study I, the researcher, am employed at the EGAF, and hold a mutual relationship of trust and respect with the institutions management team and colleagues. A professional relationship has also been established with the participants as they were all taught Design, level 2, by myself, in 2016. None of the participants are known to me in any other capacity and the relationship remains one of facilitator and student.

3.6.4 Reflexivity

Reflexivity is not a criterion to assess the quality, but an instrument to achieve it. It is the awareness the researcher should have about the quality of his or her own study (Shenton, 2004). With personal reflective practices forming a dominant part of this study as a means of documenting observations, the effectiveness of the techniques that have been practiced, initial impressions of reflective exercises implemented, initial patterns emerging in the data and the overall progression of the study. Ultimately the researcher is developing theories or constructs, which Shenton (2004) deems critical in establishing credibility.

3.6.5 Transferability

Transferability refers to the extent to which the findings of the study can be applied to other situations (Shenton, 2004). Lincoln and Guba (1985) state that it is the responsibility of the researcher to ensure that sufficient contextual information is provided to enable the reader to make such a transfer. Highlighting the boundaries of the study is also considered important to promote transferability. I have provided detailed contextual information in both Chapters 1 and 4 and cover boundaries such as number of participants, data collection methods, number and length of data collection sessions, as well as the time period over which the data were collected in Chapter 3.

3.6.6 Confirmability

Steps must be taken in the research to demonstrate that the findings are the results of the experiences and ideas of the informants rather than the predispositions and preferences of the researcher (Smith and Noble, 2014). The role of triangulation in this study will reduce the effect of researcher bias. Bias impacts on the validity of the study findings and the misinterpretation of the data. I should be careful not to have unfair inclinations or prejudices throughout the research process. The ethics committee plays a role here, ensuring that the research methodology, data collection tools and the relationship between myself and the participants do not promote bias. In this study measures have been taken to hinder any

forms of bias on my part. The colleague validation group was tasked with helping me recognise my own bias in frequently scheduled debriefing sessions.

3.6.7 Rigour

The quality and integrity of the research is essential if the findings are to be incorporated into practice and this can only be achieved if the research has sufficient rigour. In order for research to be considered rigorous it should be based on a strong theoretical base, appropriate research methods should be used, enough data collected, overlapping quality criterion should be in place, the data should be accurately analysed and recorded, the tools used to collect the data should be appropriate and the research should be presented in a transparent, explicit way (Seale and Silverman, 1997). All the elements listed by Seale and Silverman (1997) have been taken into consideration in the constructs of this study. The theoretical concepts have been thoroughly documented in Chapter 2; the appropriate research methods have been used and validated in both Chapter 1 and Chapter 3. Sufficient data was collected and appropriate tools were used to conduct the research as documented in Chapter 3. The research is presented explicitly and transparently to aid the readers understanding of the research process and in an attempt to produce sufficiently rigorous research.

3.7 Conclusion

Chapter 3 has focused on presenting the research paradigm and approach practiced in this study, as well as the implications of the selected approach. Details are conveyed with regard to the sample group selected and the data collection and analysis of the collected datum. Focus has been applied to ensuring the quality of the study, with the researchers aim to establish trustworthiness, confirmability and rigour within the study. The chapter lies the foundation for the rigour and soundness of the study and leads me to conduct the primary research and divulge the findings thereof in Chapter 5.

Chapter 4:

Results and discussion

4.1 Introduction

In chapter 1, I provided a background to this study and indicated that a review of my 2016 practitioner reflections had led me to initiating this study, bringing the focus of the study to an attempt in fostering the creativity of my third year fashion design students, through reflective practice. In the second chapter I discussed and unpacked the concepts of reflection, creativity in a design process, and teaching for creativity by way of a review of the relevant literature. Chapter 3 focused on the chosen research methodology and how the constructs of this study were implemented to ensure quality research. This fourth chapter is aimed at detailing my first and second action research cycles in which an attempt was made to promote creativity through reflection. Action research cycle 1 is an attempt to generate a change in my teaching practice to include reflective activities, and action research cycle 2 is a refinement of these changes in an attempt to promote creativity in my design students.

4.2 A prelude to the study

I diligently review my reflections at the end of each academic year. The review of my 2016 practitioner reflections, brought me to the topic of this study. More specifically, I drew the following conclusions from my practitioner reviews which I felt warranted further attention:

- The so-called “google generation” (Allen and Evans, 2012) had resulted in my design students producing surface level research for design.
- The decision making and problem solving skills of my design students were stunted.
- Students did not recognize certain activities in the design process as being creative, e.g. problem solving, costing, production planning and analysis.
- There was a lack of communication with peers amongst students regarding their creative process.
- Experimentation in the design process was lacking.
- Authenticity of the images used in the students’ mood boards was questionable.
- Student reflective skills needed development.
- Students did not see the value of reflection as a learning, developmental or problem solving tool – they found it tedious and treated it superficially.
- If students were reflecting, it was only happening at the end of the design process, only reflecting on the end product / artefact.
- Feedback had become a one-way process, with little if any reflective input from the student.
- Written reflection of and during the design process was not effective.

In discussion with my peer validation group about these conclusions it was agreed that the lack of meaningful reflection in the design process practiced at the EGAF could be hindering the design students’ creativity, and if one could successfully embed effective reflective activities into the design process it could foster creativity, as well as address other issues reflected upon in the list above. These

conclusions lead me to my research question, how can I foster the creativity in my design students through effective reflective practices? This question, in turn, led me to question my teaching practice and prompted a switch from teaching creatively to teaching for creativity (Jeffery and Craft, 2004; Kangas, 2010; Crompton, 2011) with both these concepts being discussed in Chapter 2 of this study.

An action research approach was adopted to conduct this study. Action research promotes reflective practice and is a typical approach for practitioner-centred research. The upcoming sections detail the planning and implementation of both action research cycle 1 and 2, and conclude with the reflections and findings thereof.

4.3 Action research cycle 1: An attempt to foster creativity in design students through reflection

4.3.1 Planning and implementing action research cycle 1

After obtaining the necessary approval from the EGAF to implement the action research (see appendix 4), ethical clearance from Stellenbosch University (SU-HSD-004304) and consent from the participating students and colleagues, implementation of my planned action research cycle 1 could commence.

A thorough review of the relevant literature led me to the development of my lesson plan to be implemented as cycle 1 of this study. The lesson plan is embedded with various reflective exercises (Allen and Evans, 2012; Ryan and Brough, 2012) and ran in conjunction with the Fashion Design 3 self-expressive range brief (see appendix 3). The lesson plan was designed in an attempt to change my teaching approach, as well as foster creativity in my teaching approach. Lesson plan: week 1 of action research cycle 1 spanned over the course of 5 days and can be viewed in appendix 1. The lesson plan, as well as the aims and objectives of each exercise will be discussed in the following section. See table 4.1 below for the lesson plan to see the sequence of my activities.

Table 4.1: Lesson plan in summary

Lesson Plan: Week 1 of action plan					
Module: Fashion Design 3					
	Day 1	Day 2	Day 3	Day 4	Day 5
Contact Time 10:00 – 12:30	>Project briefing >Question and answer Session >Reflective practices Presentation >Presentation of Task 1 (artefact Reflection) >Presentation of Task 2 (self-reflection: guided)	>Facilitator brief on activity: > Group peer reflective discussions: - divide class into 4 groups of 5 students each -using yesterdays recorded reflections as a catalyst discuss your thoughts and feelings with peers >reflect on the peer disc. >whole class design concept discussion	>Image reflection presentation >design concept validation discussions -one on one interactive discussions between student and facilitator >While students are not in consultation they should continue with design concept research	>Mood/design concept board: >Produce a mood/ concept board reflecting: -narrative -your design aesthetic -design direction -colour direction -fabrication and texture -silhouette -styling direction	>Facilitator brief on activity >critical friend/peer reflection -one on one reflection with a peer -present mood/ design concept board -validate and share ideas and opinions >Reflect on peer discussion >Administer critical incident Questionnaire #1

From the table above you can see that day 1 began with a detailed briefing of the tasks set within the Fashion Design 3, self-expressive range brief, detailing the aims and objectives set. This was followed by a short question and answer session, with the aim that all students understood what was expected of them, as well as how we intended to meet those expectations. Before the introduction of the first reflective exercise, a brief presentation on reflective practice in general was conducted. The aim of this presentation was to ensure that the students understood the process of reflection and the value thereof. Different methods of reflection were also discussed, along with the advantages of each method. This approach is in line with Moon (1999), who states that educators should not assume that students understand the concept of reflection, or that they are practicing reflection, and that facilitators should implement guided, informed reflective activities.

After a short recess, Task 1 – artefact reflection (appendix 11) was presented. This task required the students to individually reflect on their design portfolios produced during their second year of study in 2016. The task included a set of guided questions to aid them in a critical reflection of their work. This exercise focused on the students developing a vision of how they wanted to improve, identifying negative and positive aspects of their work and what they could do to ensure they did not repeat

previous errors, or how they could build on positive aspects of their work. Elements which the students could focus on in the critical reflection of their design portfolios could be; use of media, layout, use of line and shape, proportion, typography, readability, fashion illustration, technical drawing accuracy, labelling and design descriptions, as well as the creativity of their designs and range creation. After this personal assessment of their work the students will set goals for future design endeavours, with the aim of improving their practice.

Task 2 – a guided self-reflective worksheet (appendix 10) – was also administered. This task was specifically aimed at an introspective reflection of self (as described by Lowy, 2001), in an attempt to make students aware of their strengths and weaknesses as designers, as well as identify core values and aims they hoped to maintain or achieve as designers. This was the first step in the development of a self-expressive range. The student had to have a clear understanding of self before engaging in a self-expressive design process. These two tasks were recorded in the students' visual diaries and should have been concluded during the course of the day as the reflections from these two tasks would be used in group discussions during day 2.

Day 2 began with the class being divided into four groups of five students each. Using the recorded reflections from day 1 as a catalyst for discussion, the groups were tasked with conducting group reflective discussions. Each group was appointed a chairperson to ensure the discussion stayed on topic and that each member got equal opportunity to contribute. The objective of these peer discussions was to encourage the students to verbalise their reflective thoughts and get comment and or validation. Verbal reflective opportunities are encouraged by Schön (1987) and James (2007), as they create unique opportunities for the learner to critically reflect and engage with their peers. The facilitator was a silent observer during the peer group discussions. On conclusion of the discussions the students were required to reflect on the discussions in their journals, indicating any new revelations, as well as whether the process was beneficial and enjoyable. The rest of the day was made available to the students to conduct design concept research, which would be documented in their visual diaries.

In order to address the issue of image authenticity in student's work, day 3 began with a brief presentation on image reflection. Image reflection would ensure the students applied serious consideration to each image selected, the images selected should evoke emotion and the compilation of images should send one clear concept (as suggested by De Wet and Tselepis, 2015). This reflective practice should be applied to images used within the visual diary, as well as when producing final mood / design boards. The rest of the day was set aside for design concept validation meetings, one-on-one interactive discussions between the student and facilitator (as described by Danaghy and Morss, 2000). The students were informed to arrive prepared with a brief pitch of their self-expressive design concept, with supportive visuals and information in the form of their visual diaries. The meetings were to be led by the students, with them initiating and ensuring that they meet all the aims they set to achieve. They were to walk away from the validation meeting with a clear and confident design direction in mind. While students were not in consultation they were to continue with individual design concept research.

Day 4 opened with a brief class discussion to establish that each student was in a content and confident position with regards to their design direction, as I did not want to move on to the next task if not. The students were then tasked to make use of the morning to produce a digital mood / concept board reflecting their design concept. They were to apply the image reflective process discussed earlier in the week to ensure authenticity and true concept is conveyed. These mood boards would be used in the fifth day's critical friend / peer reflection activity.

On day 5, I purposefully paired students for critical friend / peer reflective discussions. These one-on-one peer discussions allowed each student to present and verbalise their design concept, using their mood / concept boards developed on day 4 as a visual aid. The critical friend was tasked with listening, questioning and critiquing the visual mood / concept board. The students were paired in such a way that they could provide support and share information. The students paired together shared elements within their design concept, the target market, design techniques or the market sector. Once again the discussions were silently observed by the facilitator/myself and reflected upon in my practitioner reflections.

This five-day process would conclude the initial design concept stage of the fashion design process practiced at EGAF, with each student confidently coming away from the week with a distinctive, self-expressive design concept to carry forward to the next stage of the design process. Day 5 concluded with the administration of a critical incident questionnaire (see appendix 6), where the participants were asked to reflect on the activities conducted over the last 5 days of action research cycle 1. The next section focuses on my observations and reflections of action research cycle 1, as well as an account of the participants' responses recorded in the critical incident questionnaire, and concludes in a discussion of possible changes to be implemented in action research cycle 2.

4.3.2 Reflections on action research cycle 1

Reflection is an important part of the action research cycle (McNiff and Whitehead, 2005). It allows the practitioner researcher to reflect on what she has done. The observations made by the practitioner and the input of the student participants can be taken into account so that changes can be made to improve one's teaching practices. The researcher can monitor their actions by asking four questions designed to reflect on one's practice (McNiff and Whitehead, 2005) namely:

- What have I done?
- What have I learnt?
- What is the significance of this learning? and
- How will my new learning generate new actions? (Peters, 1991).

I followed these guiding questions to assist myself in reflecting on cycle 1 of my action research study.

1) What have I done?

In an attempt to foster creativity in my third year fashion design students, I embedded reflective exercises into my five-day lesson plan, hereby changing my teaching practice from teaching creatively, to teaching for creativity. I included various forms of reflection, with the aim of determining which add value to the design process and the students' learning. All these activities are detailed in the previous section.

2) *What have I learnt?*

I was overly optimistic with the inclusion of too many different reflective exercises introduced over a short period of time. A lot of focus was steered towards reflection and the theory behind achieving critical reflection, together with the presentation of a complex design brief, this created some confusion and delayed the onset of action from some of the participants. Perhaps an overload of information at one point and the change in my teaching approach being the cause.

My observations and the evidence found in the critical incident questionnaire have validated the value of the self-reflection exercise. Identifying their personal strengths and weaknesses as a student designer is the starting point of determining a self-expressive design direction.

The peer group reflective exercise was managed well and produced the results I had set out to achieve. To begin with, not all students were open to the idea of sharing their design concepts as these are traditionally guarded. Students are not accustomed to discussing initial concepts with their peers; traditionally peer reflection only takes place at the end of the design process, when the creative process is completed. The discussions were fruitful, they got the students talking and sharing. Students who were showing signs of confusion and low confidence gained clarity and self-assurance; even if it was merely that they were not the only ones feeling unsure of themselves.

Although the image reflection did add value and aided the students in producing visual mood boards that were truly reflective of their self-expressive design concepts, it is a new thought process that had to be applied and this hindered the students' progression, resulting in a time consuming exercise. This concept of image reflection should be introduced into the design process at the second year level of design education, so that it becomes second nature to the third year students. Now that they were aware of the concept, I expected it to occur naturally, with some reminding of course, in action research cycle 2.

According to the critical incident questionnaire completed by the participants, the one-on-one feedback discussions with the facilitator were pivotal in their design process and the promotion of their creativity. Each participant cited the activity as being the most affirming, helpful and engaging activity of the design process. The change in format for the feedback session, whereby the student was handed the reins in directing the meeting and ensuring that the aims and objectives of the meeting were met, worked well. The students were forced to prepare and arrive having already reflected on their design concepts thus far. I, the facilitator, played the role of enquirer and validator. My aim was also to steer them in directions

which could further enhance their design concepts and in turn promote their creativity. Some students expressed the wish of more time to conduct lengthier consultations.

By the fifth day of the lesson plan, the students were already becoming accustomed to talking to their peers about their design concepts. The purposefully paired peer reflective exercise was observed as being successful. Students were told that each pair shared a nexus and once they discovered this connection the sharing of ideas and reflecting on them flowed more easily. The discussions also resulted in the students coming to the realization that although they shared a common nexus, the overall concept and most definitely the resultant end product would be completely different from one another. This was always a hindrance, students are afraid of producing self-expressive work that is similar or the same as another student, resulting in the culture of secrecy. I have learnt, however, that communication and openness about design concept promotes confidence in design concepts and further promotes distinctive creativity.

I observed that the participants who were hesitant and apprehensive about sharing in the group format were comfortable and confident sharing and contributing in a one-on-one situation. I came to this conclusion as in the group format some students remained quiet, did not participate nor did they offer their own reflections and so came across as hesitant and apprehensive. These same students were animated in their one-on-one interactions with their peers and had fluid and productive conversations. Providing equal opportunities for all personalities within the class is therefore essential to achieving the outcomes set, with all learners. My observations of the peer reflective exercise therefore brought me to the conclusion that different formats of reflective discussion were important, this created a comfortable platform for each student.

3) What is the significance of this learning?

My first attempt at action research revealed that I should not be overly optimistic, but rather realistic in my approach. The lessons gave me more insight into my practice and insights in the learners' approach and practices when presented with a challenging design brief. The implementation of numerous reflective exercises allowed me to observe first hand which of these added value to the design process and which captured the students' engagement, as well as those that were not effective and hindered the design process and the fostering of creativity. The significance of this learning will lead me to making informed changes to the lesson plan scheduled for action research cycle 2, ultimately improving my professional practice while attempting to promote creativity within my design students through reflective practice.

4) How will my new learning generate new actions?

There are a number of things I had to do differently. After reflecting on the reflective activities introduced in my lesson plan for action research cycle 1, it was determined that I was overly optimistic, this could be combatted by eliminating some of the lessor effective reflective exercises, or introducing them to the students at an earlier stage in their studies, so as not to overwhelm them with too many new concepts

at once. During the initial stages of the group discussions, it seemed as if students were still confused, this could be caused by a lack of guidance on my part due to an assumption of existing skills. I could perhaps, in the next cycle, give more guidance instead of leaving things in the hands of the learners.

Getting validation from their peers and their facilitator gave the students a sense of confidence and clarity, armed with these attributes led to increased productivity. I needed to ensure I focused on reflective activities that promote sharing of ideas and the validation thereof. This new learning and the actions generated from action research cycle 1 were endorsed by my colleague validation group. My colleague validation group proved to be invaluable to my research process, as they played the role of my sounding board with regards to fresh ideas, as well as advisors and validators on decisions I was making.

After conducting action research cycle 1 and having drafted my findings thereof I presented these to my colleagues. There was agreement on the number or over load of reflective activities and discussions were entered into on how to filter these into the lower levels of study in preparation for the 3rd year. The fact that the students were communicating with one another was commended and viewed as an essential lifelong tool, which should be encouraged in all classes. As with the students, the validation I received from my colleagues gave me the confidence to move forward with the planning and implementation of action research cycle 2.

4.4 Action research cycle 2

4.4.1 Planning and implementing action research cycle 2

My second action research cycle was scheduled to take place six weeks after the first cycle, this gave me sufficient time to reflect on cycle 1, consult with my colleague validation group and then plan the second cycle. The planning to be incorporated into the week 2 lesson plan (see appendix 2) took all of the findings and reflections of the first cycle of action research into account, with the aim of improving my teaching practice and promoting creativity in my design students through reflective practice.

The collection of data in action research cycle 2 again hinged on my facilitator observations and reflections, colleague validation group discussions, and participant questionnaires. A second critical incident questionnaire was administered at the end of the five day lesson plan, alongside an open-ended survey aimed at gaining insight into the participants' perceptions of reflection and the use thereof to promote creativity. The colleague validation group served as a triangulator. Through triangulation, I compared the data obtained from the learner participants and the researcher observations that provided a balanced, valid picture of what transpired in the research situation.

The lesson plan scheduled for action research cycle 2 was also linked, or rather an extension of, the self-expressive design brief presented in cycle 1. The students were tasked with further developing and actualising their self-expressive design concepts by developing rough fashion design sketches

reflecting their design concept and ultimately conducting final design selection to formulate a range of garments which told their story.

With the realization that I was overly optimistic by including too many different reflective techniques in the previous lesson plan, I planned to remove the reflective exercises that caused confusion and focused on those identified as being helpful in providing clarity and confidence within the students. Prior to cycle 2 of my action research being implemented, the students were reminded of the research activities about to be implemented, as well as the aim thereof. The participants were also duly reminded of their option to withdraw from the study should they wish to do so. I have included a summarised Lesson plan below in Table 4.2 for you to see the sequence of my activities in cycle 2.

Table 4.2: Lesson plan summary

Lesson Plan: Week 2					
Module: Fashion Design 3					
	Day 1	Day 2	Day 3	Day 4	Day 5
Contact Time 10:00 – 12:30	>Review Brief -group discussion (whole class) -critical friend/ peer reflection -document reflection in visual diary >Facilitator and student one on one interactive feedback/ validation and final design selection consultations	>Facilitator and student one on one interactive feedback/ validation and final design selection consultations	>Group validation meetings >students are to continue working individually on their design refinement, realisation and presentation	>Roaming facilitation >students are to continue working individually on their design refinement, realisation and presentation	>Roaming facilitation >students are to continue working individually on their design refinement, realisation and presentation >Administer critical incident questionnaire # 2 >Administer student survey

As evident in table 4.2 above, day 1 began with a review of the self-expressive design brief, ensuring that all learners were aware of the outcomes to be met and what was to be achieved during the course of the week. This was followed by a paired critical friend / peer reflection exercise, where the students were paired up into the same pairs as in cycle 1. The aim of this reflective exercise was to get the students actively communicating about their design concepts early in the week. The paired reflective exercise was observed to be successful in the first cycle, with all students looking relaxed and at ease with communicating and sharing. They were tasked with reflecting on what they had achieved in the previous cycle, what they had developed between cycle 1 and 2, as well as what they aimed to achieve in cycle 2 and how they were going to go about that. Over the latter half of the day and for the duration of day 2, facilitator one-on-one interactive feedback / validation consultations were scheduled. These sessions were identified as being of great value to the learners' design process and the change in

format from facilitator-led to student-driven aided in the success and value. Each student was allocated a thirty-minute timeslot as opposed to the fifteen minutes allocated the cycle 1 feedback sessions. This was to ensure each student had sufficient time to discuss and reflect on all aspects of the brief, guaranteeing that each student felt confident at the end of the consultation that all their concerns had been addressed.

On day 3, a group validation / reflective session was scheduled. By this time the students had consulted with the facilitator and finalised design selection in the formulation of their self-expressive range. The guided group reflective session was designed to encourage each member to reflect on their personal design process developed within the confines of the brief. The group session was managed as in cycle 1, with the only difference being that I spent time clearly explaining the aims and intended outcomes of the exercise. I also intentionally selected specific students to chair the peer group discussions and ensured these selected few were aware of the role of the chairperson. These actions were implemented in an effort to facilitate constructive, meaningful discussions where all students participate, avoiding the impediments observed in cycle 1.

Day 4 and 5 were scheduled as individual work days, with students working on their individual design concepts, garment design refinement, and the presentation of these designs. I was available as a roaming observer, adding critique and validation where and when requested. The students were encouraged to continue with daily written reflections within their visual diaries. Day 5 was concluded open-ended survey (see appendix 8). Both these data collection tools were administered and documented in Chapter 3, in an effort to produce quality research.

The following section reveals the reflections and findings of my second cycle of action research.

4.4.2 Reflections and findings of action research cycle 2

The lesson plan and reflective activities in cycle 1 were aimed at introducing students to the reflective process and conducting various reflective activities to determine which added value to the students learning and promoted their creativity within their design process. The lesson plan and reflective activities conducted in cycle 2 focused on implementing refined reflective exercises identified in cycle 1 as being of value, and doing away with others. This was in response to my observations and comments from the participants in cycle 1, which revealed that too much imposed reflection, can possibly stifle creativity, which is contrary to the purpose of this study.

I conducted solo content analysis, practicing a conventional content analysis approach, allowing the data categories to flow directly from the data. These themes were consistently repeated throughout my various data sets (own reflection, observation, student reflections, critical incident questionnaire and the student survey). These themes can be referred to as “clarity” and “confidence” throughout their design and reflective processes. The students gained clarity and confidence through validation and sharing activities practiced in cycle 2.

My observations and reflections of the lessons and activities conducted in cycle 2 of my action research were of a positive nature. The students responded positively to the review of the brief and the presentation of the activities to be conducted. They were pleased that I had listened and acted on their comments made regarding the previous cycle's lesson plan. They appeared eager and keen to begin engaging with their peers.

On observation of the peer, paired reflective activities, the students seemed relaxed and natural in their shared dialogue. This indicated that they had arrived prepared and open to share idea developments. These observations are reflected in comments made by the students in the critical incident questionnaire conducted. The theme of clarity was confirmed by words / terms used in the survey such as “*sense of direction*”, as used by this respondent:

After I have spoken to my peers I feel a sense of direction.

The validation theme was repeated and confirmed by respondents using words such as “agreed”, “trust” in the survey with some of them reading as follows:

I was surprised and happy that my peers agreed with my self-reflection, I was unsure of myself before.

Hearing my peers open up about who they are and what defines them helped me trust their input about my design concept.

Confidence as a theme came up repeatedly as they were becoming more comfortable to share their ideas and reflections. These themes were clear from their uses of the words “together”, “confident” and terms such as “less self-conscious”. The responses below contextualise these themes effectively:

Feedback from peers is great because we can reflect on ideas together.

Talking about my feelings and situation in class with my peers helps me overcome obstacles, and knowing I am not alone, or the only one struggling makes me less self-conscious and more confident to show my creativity.

These comments and my observations indicate that paired peer reflective dialogues produce a clear sense of direction with regards to their design concepts and aided them in gaining confidence.

As with the first cycle the one-on-one facilitator feedback sessions were successful. The learners arrived prepared and were keen participants. They were grateful for the extra time allocated. In these consultations with me, students were able to articulate their design direction and had more evidence of design research having been done. I found that the learners, even those usually not overly confident when in consultation, definitely displayed more confidence and a sense of clarity in their approach and conduct during the consultations.

The students seemed to seek formal validation of their design concept in this reflective session, this validation in turn gave them confidence and clarity. This is also evident in the comments provided by the students when asked to reflect in the student survey on the feedback sessions, as shown below:

After consulting with my lecturer I had clear direction in my concept.

This is when I felt on top of everything, it helped me feel more engaged and prepared.

Speaking to my lecturer gave me confidence and affirmation in my design direction which was helpful and motivating.

I didn't think I would be confident at this stage of the process.

Each time I consulted with [the lecturer] she asked me questions that really make me think about myself and my ideas, it is eye-opening and makes me more self-aware.

Talking about my concept made me realise that I have attached emotion to my concept; getting clarity on those emotions gave me the confidence to be creative and self-expressive. I have never attached emotion to my design concepts before.

The one-on-one consultations with [the lecturer] helped me clarify my creative direction.

As with the previous exercise the main outcome for the learners was clarity and confidence in their design concept as shown by their responses above, the relevance of this trend is to be explored further within this section.

The group reflective activities set on day 3 ran more smoothly than in cycle 1. The chairpersons were more aware of their roles and responsibilities and managed the group discussions well. No conflict was noted within the groups, but some students did display traits of boredom or a lack of interest. This was later revealed to be due to the fact that they felt they did not need further validation or input because they were confident and clear on the creative direction they wished to pursue, they thought their time would have been used more productively just getting on with their design work. Perhaps in the future these group reflective sessions could be voluntary or specifically for students who are identified as not having clarity on their design direction as yet. The group reflective activities were further reflected upon by the students, with some relevant comments being recorded below:

Group reflective practice helps with my creativity, when each group member reflects on a certain something, you get to see the bigger picture, you compare, identify and problem solve together.

I feel more focused after group reflection and have a better idea of where I want to go and what I want to do.

Day 4 and 5 were set aside for the students to work on their design concepts, range realization and the presentation thereof. I featured as a roaming facilitator, providing critique as I saw fit, attending to student queries and observing the level of creativity being produced. The students at this point all seemed confident in their design direction, and were putting more thought into how the garment designs were generated, and how the presentation of these designs in a two dimensional format, would truly reflect their self-expressive design concepts. They had become more self-aware and were producing authentic designs reflecting this new awareness.

The students displayed more confidence and clarity in their design concept and displayed creative approaches in conveying their concepts into garment designs, which truly reflected their self-expressive story. Could this mean the newly introduced reflective activities into the design process had resulted in fostering the creativity of my design students? The student participants were asked in the student survey to describe how they thought the reflective practices introduced affected their creativity in the classroom. The sample of responses shown below was affirming of the key themes; clarity and confidence:

Reflecting on my work made me feel more confident and this enabled me to be more creative.

Reflection made my conceptualization easier and faster than usual.

Reflection made me more aware of who I am and what I am capable of, this gave me confidence to be more creative and push my boundaries.

It (reflection) opened up my mind, making me think things through when creating.

Exploring past work through reflection helped me identify strengths and weaknesses in my work, which were affecting my creativity.

I have realised that sharing ideas and getting input from others can be very helpful in my design process.

Reflection has resulted in my work being more fluent and I feel more in control and confident about it.

Reflection has pushed my creativity, not only with my designs, but also how I went about my design process.

Two students indicated that the reflective activities did not promote their creativity, with one participant stating that although it influenced certain decisions, it did not have an effect on his or her level of

creativity. The other stated that although the reflective activities made him or her think more critically, this hindered the creative process, “over thinking everything, instead of just freeing my creativity and enjoying the process.” These views were, however, in the minority.

Again it is noted that much of the commentary from the students indicates a gain in confidence and clarity when practicing reflection, and that this confidence and clarity aids their creativity. Confidence is defined by the Oxford English Dictionary (1984, p. 149) as the quality of being certain of your abilities, the feeling of belief and self-reliance that you can do something, and is described as a state of being certain either that a hypothesis or a prediction is correct, or that a chosen course of action is the best or most effective. Clarity is defined, in the same source, as the quality or state of being clear, coherent and intelligible, with the ability to think clearly and understand things clearly (1984, p. 128). With the student designers having gained these qualities within their conceptual design process due to reflection the promotion of creativity was affirmed.

An analysis of the artefacts produced by the students in the form of visual diaries, concept design boards and final range boards was also conducted. The work was displayed in an exhibition format and together with my colleague validation group we compared previous work produced by each student in 2016 with the work produced for the 2017 self-expressive design brief. Clear stories were evident through their design work, indicating a thought full editing process. The supportive imagery was also on a whole viewed as being more authentic, with a less is more approach being adopted. It was observed that the designs or range of designs produced in 2017 showed a better understanding and interpretation of the self-expressive brief. This is clear evidence of the image reflective activities being practiced by the students. With creativity being defined as an interaction of aptitude, process and environment, by which an individual produces a perceptible product which is both novel and useful with in a social context (Plucker, Beghetto and Dow, 2004, p. 48), and with this definition in mind it was agreed by myself and the colleague validation group that an elevation of creativity as defined in this study produced by the students was evident in the 2017 set of work when compared to the previous work produced in 2016 by the same learner.

4.5 Conclusion

In conclusion my findings reveal that guided, informed reflective activities introduced into the student design process aided in providing the students with confidence and clarity. These two qualities in turn foster creativity as the students’ inhibitions, apprehensions and lack of self-awareness are addressed. Being confident and having clarity as developed through relevant reflective activities fosters or promotes the students’ creativity.

Chapter 5

Conclusions and possible implications

5.1 Introduction

This action research process has been an enriching experience, and having conducted action research in my classroom, I became aware that facilitators are placed in a unique position to develop the critical and creative abilities of their learners. This action research project highlights the notion that action research is an option that facilitators can use to improve their practices.

The research I undertook focused on determining how I could foster creativity in my design students through reflective practices. The limited literature relevant to this inquiry supports the notion that if appropriate reflective practices are included into the lesson plans, and that these reflective practices are conducted with well-informed learners in a guided fashion, creativity may be fostered (Boud, Keogh and Walker, 1985; Moon, 1999; Craft, 2000; McClure, 2005). In conclusion, I revisit my research questions.

5.2 How are effective reflective practices utilized to foster design students creativity?

Both the literature (Boud, Keogh and Walker, 1985) and my in-practice observations have confirmed that ensuring students are well-informed on the constructs of reflection and the value thereof will enhance the reflective process. Implementing embedded, relevant reflective exercises in a guided fashion, with a focus on dialogical practice fostered the design students' creativity in this study. The reflective exercises provided the students with the platform to discuss and communicate their design concepts with their peers and the facilitator. These discussions lead the students to become self-aware, confident and clear on their design direction, ultimately fostering their creativity.

5.3 How will a shift from teaching creatively to teaching for creativity aid in fostering creativity?

Teaching for creativity not only focuses on creative teaching methods and strategies of teaching, but on developing students' creative thinking and creative abilities (Owens, 2007), as well as encouraging and providing opportunities for the development of those abilities. This was achieved by shifting the focus from the teacher to the learner, contributing to self-directed learning through reflection. My role as facilitator became one of fostering creativity and so providing opportunities for the students to develop their creative authenticity within the design process. The lesson plans allowed for students to identify and discover their own creative strengths and develop skills of self-evaluation, taking ownership of their own learning. This shift from teaching creatively to teaching for creativity supported the notion of fostering creativity through reflection and was crucial to achieving the outcomes of this study.

5.4 How does one foster creativity in the design process through reflection?

Reflective activity practiced within the fashion design process allows the students to communicate and engage with their peers, this evokes self-awareness and self-direction (Lowy, 2001). The reflective activities encourage the students to assess their design process, develop an understanding of context, compare different design projects, rethink dominant design choices and identify unconscious aspects of the design problem (Sharmin and Bailey, 2011). This repeated testing of the design problem, dialogically, enhanced the reflective process and aided the students in gaining clarity and confidence in their design concepts. When design students are confident and clear on their design direction, their creativity is evoked. The suspension of apprehension, lack of self-awareness and reservation within the students allow autonomy of self-expression. To conclude, if practiced appropriately, reflective practices within the design process were observed to foster the creativity of design students in this study.

5.5 Possible implications

After considering the conclusions based on the theory and empirical findings, possible implications for theory, practice, policy and future research are discussed in the following paragraphs, a reflection of the significance of my study.

5.5.1 Implications for theory

Theoretical literature covering the key concepts of this study; reflection and creativity, is in abundance, but finding relevant literature pertaining to the context of fashion design proved challenging. This study will aid in addressing this gap in the limited pool of research within the fashion design discipline, as well as add additional support to the existing literature more broadly.

The findings of the study confirm the theory presented in the relevant literature presented in this study, with regards to fostering creativity in fashion design students through reflection. The relevant theory was applied in practice and yielded positive outcomes, as discussed in Chapter 4. Testing the theory in practice through action research proved both beneficial to myself, my practice and my students, resulting in a heightened personal understanding of the theory and enabling me to contribute more cogently to ongoing theoretical conversations.

The findings of this study, although derived from a fashion design context, provide a basis for other studies in design disciplines and ideas generating disciplines in education to foster students' creativity through reflection, if the relevant theoretical perspectives are applied.

5.5.2 Implications for policy

This study is confined to the EGAF and so any policy implications would only be applicable to the EGAF. The EGAF has internally developed policies tailored to the context of the institution, which are reconsidered and renewed every four years to meet the demands of our rapidly developing and forever changing disciplines of both education and fashion.

Practice is usually shaped by policy, but at the EGAF we develop practice informing policies. My colleague validation group expressed the need to further implement my findings within my practice and to integrate it into the teaching and assessment policies of the academy. This would require a review of curriculum, as per policy, and the inclusive input of all relevant stakeholders. The value of practitioner-led research was also discussed as an addition to the staff development policy at the EGAF, with the aims of the academy to deliver innovative design education of a high quality.

5.5.3 Implications for practice

The nature of the study, being practitioner-led focused on both responding to the research question and focus of the study (how one can foster creativity in fashion design students through reflection) and the on improving my own practice. Being a reflective practitioner I am constantly seeking ways of improving my practice and have come to value the impact reflective practice has had on my academic and personal pursuits. This is an understanding I would like to impart to my students, not only to foster their creativity, but to instill as a lifelong skill to be practiced beyond graduation.

The change in my practice of design education from teaching creatively to teaching for creativity, brought about by this study has excited me and I wish to pursue this further, to further enhance my practice and my students' design education experience. I have also come to realize the value of action research in practice and plan to pursue action research in my practice as the need arises, as well as encourage my colleagues to do so. The action research process could be to a lesser extent than this study, but still yield progressive results, relative to the aims and objectives of the EGAF.

I plan to oversee and implement the practice of reflection throughout the programs offered at the EGAF. The integration of reflective practices should strategically be introduced at the lower levels of study and throughout the various modules, with the aim of 3rd year students grasping the value of reflection and implementing reflective practices that are beneficial, not only within the design process, but in a holistic manner.

5.5.4 Implications for further research

This study raises a number of opportunities for future research, both in terms of theory development and concept validation. More research would be valuable in refining and further elaborating on my findings. There are four areas of further research I would recommend. These are discussed below.

Firstly, had time permitted, I would have liked to have conducted a 3rd action research cycle to further refine my teaching practice and address issues of concern. This can, however, be conducted in the new academic year, as I plan to adopt the approach of teaching for creativity with a focus on reflective practice in the future.

Secondly, an in-depth study on the methods and approaches utilized in the concept of teaching for creativity would be beneficial. This study provided me with a sound understanding of the concept, but I am now intrigued and feel I have more to learn.

Thirdly, to broaden the sample and validate my findings, sharing this study and implementing it at other similar fashion design institutions would be of interest, and fourthly to test the theory, the study could be put into effect at design institutions focused on other design disciplines, such as jewelry, textile or furniture design, as these disciplines follow a similar design process.

Finally, the concept of action research, used as a means to solve problems in education, as well as improving personal practice to keep up with the transformation of higher education and contemporary society, remains a powerful tool in changing teachers' and students' mindsets. Action research empowered me as a teacher and I endeavor to undertake action research and encourage other facilitators to pursue it in the future as an approach to professional empowerment.

5.6 Final remarks

An essential function of the action research concept is to value the importance of looking back at one's work, both in terms of process and results. The overarching questions to be answered in my reflective critique are; how do I intend to use the results of this project? And what would I do differently next time?

As a novice researcher and having tackled action research for the first time, I found the experience challenging at times. I did not anticipate the ethical dilemmas of action research given the unique researcher-participant relationship, but with guidance I managed to overcome these obstacles in the pursuit of quality research. A key element to the success of the study was the resolute participation of the student participants. I credit this unwavering support in the process to the trust I have built up with my students over their previous years of study. They trust I have their best interests at heart and were therefore open to the changes made in my teaching approach.

I have come to value the process of action research. As the name suggests action is taken to bring about change and the research brings an increased understanding on the part of the researcher and the participants. It bridges the gap between theory, research and practice and allows the researcher to study problems which have a direct and obvious relevance to their practice. It is a valuable research methodology that I will most certainly practice again and plan to encourage the facilitators at the EGAF to pursue in order to problem solve and achieve our endeavor of innovative, high quality education.

Being a novice researcher I was overly optimistic in cycle 1 of my action research. This was detrimental to my students' learning, but taught me restraint and the ability to edit my ideas and plans. I plan to revisit the Fashion Design curriculum from level 1 through to level 3 to identify when and where certain beneficial reflective practices could be introduced into the design process practiced at the EGAF, with the ultimate goal of instilling a culture of reflective practice within the students' design process, consciously promoting their creativity and instilling a lifelong tool of reflection to be practiced beyond graduation.

I have learnt that being open to sharing your work with others is a critical part of the reflective thinking activity. If you need to step out of your comfort zone in sharing your work with others, be willing to embrace that challenge. This process of being open to critique will result in self-improvement, as well as the enhancement of quality in your work. I was apprehensive of the establishment of my colleague validation group and their involvement in my study, and was anxious of the criticism I would receive, but I soon realized the value thereof. The study revealed that the students' dialogical sharing of ideas brought about confidence and clarity in their concepts, which ultimately led to fostering creativity. This culture of sharing is definitely a component of my action research that I will continue to practice both in a professional capacity, as well as in my teaching practices.

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Appendix 1

Lesson Plan: Week 1 of action plan (20 February – 24 February 2017)					
Module: Fashion Design 3					
	Monday – 20 Feb. 2017	Tuesday – 21 Feb. 2017	Wednesday – 22 Feb. 2017	Thursday – 23 Feb. 2017	Friday – 24 Feb. 2017
Contact Time 10:00 – 12:30	<ul style="list-style-type: none"> >Project briefing >Question and answer Session >Reflective practices Presentation >Presentation of Task 1 (artefact Reflection) >Presentation of Task 2 (self-reflection: guided) 	<ul style="list-style-type: none"> >Facilitator brief on activity: > Group peer reflective discussions: <ul style="list-style-type: none"> -divide class into 4 groups of 5 students each -using yesterdays recorded reflections as a catalyst discuss your thoughts and feelings with peers >reflect on the peer disc. >whole class design concept discussion 	<ul style="list-style-type: none"> >Image reflection presentation >design concept validation discussions -one on one interactive discussions between student and facilitator >While students are not in consultation they should continue with design concept research 	<ul style="list-style-type: none"> >Mood/design concept board: >Produce a mood/concept board reflecting: <ul style="list-style-type: none"> -narrative -your design aesthetic -design direction -colour direction -fabrication and texture -silhouette -styling direction 	<ul style="list-style-type: none"> >Facilitator brief on activity >critical friend/peer reflection -one on one reflection with a peer -present mood/design concept board -validate and share ideas and opinions >Reflect on peer discussion >Administer critical incident Questionnaire #1
Non-contact time 13:00 – 16:30	<ul style="list-style-type: none"> >Artefact reflection activity: 2nd year Design portfolio and fashion garments >Self-reflection: >Reflections are to be recorded in a visual diary 	<ul style="list-style-type: none"> >Students to continue with design concept research >research to be documented in visual diary 	<ul style="list-style-type: none"> >continue: -Design concept research 	<ul style="list-style-type: none"> >continue: -Mood/design concept board -Design concept research 	<ul style="list-style-type: none"> >complete design concept research >Document all aspects in your reflective visual diary >Produce rough sketches of design ideas >Students to schedule design consultation appointments should the need arise.

	Monday	Tuesday	Wednesday	Thursday	Friday
Notes of changes made					

Appendix 2

Lesson Plan: Week 2 (3 April – 7 April 2017)					
Module: Fashion Design 3					
	Monday – 3 April 2017	Tuesday –4 April 2017	Wednesday – 5 April 2017	Thursday – 6 April 2017	Friday – 7 April 2017
Contact Time 10:00 – 12:30	<ul style="list-style-type: none"> >Review Brief -group discussion (whole class) -critical friend/ peer reflection -document reflection in visual diary >Facilitator and student one on one interactive feedback/validation and final design selection consultations 	<ul style="list-style-type: none"> >Facilitator and student one on one interactive feedback/validation and final design selection consultations 	<ul style="list-style-type: none"> >Group validation meetings >students are to continue working individually on their design refinement, realisation and presentation 	<ul style="list-style-type: none"> >Roaming facilitation >students are to continue working individually on their design refinement, realisation and presentation 	<ul style="list-style-type: none"> >Roaming facilitation >students are to continue working individually on their design refinement, realisation and presentation >Administer critical incident questionnaire # 2 >Administer student survey
Non-contact time 13:00 – 16:30	<ul style="list-style-type: none"> >Design editing >design presentation planning 	<ul style="list-style-type: none"> >Design editing >design presentation planning 			

Appendix 3



Course: Design
Module: Fashion Design 3
Learning unit: Focus on Design - Self Expression
Learning unit number: Des 300.2
Facilitator: Fiona Abdo

Project Name: Self-expression Range 2017

Learning unit outcomes

This unit is about the skills needed to design an end product or prototype where the development of self-expression and personal style of the student is paramount. In this unit, students are provided with an opportunity to develop personal ideas and sources of inspiration into a design brief which meets their own personal needs and targets rather than those of a client.

Successful achievement of this module is dependent upon students meeting the assessment requirements and outcomes and producing work of a satisfactory and reliable standard.

The unit (LU DES300.2) aims to enable the students to:

- formulate a design choice or direction
- identify a progression route
- encompass divergent thought
- generate and evaluate ideas

Task

Drawing on the knowledge and skills you have developed over the previous two years of study you are required to develop a range of garments / ensembles which is self-expressive. The designs should interpret your personal view on contemporary fashion and express your philosophy, culture and ideals as a designer. All research, design development and final presentation is to be documented and presented in a creative yet professional manner in order to communicate your range to a wider audience and meet the standards set by the Elizabeth Galloway Academy of Fashion and the clothing industry.

Aims

- Formulate a design brief which encompasses self-expression.
- Identify sources and inspiration.
- Generate a range of design ideas and evaluate their feasibility.
- Explore and develop both creative and technical aspects of the work.
- Evaluate the impact of innovative ideas and divergent thought in terms of their suitability and feasibility.
- Demonstrate that production strategies have been considered in the development of the design brief.

Task Breakdown

Cycle 1 – Reflective Visual Diary Development

- Designer profile
- Develop your own brief: Aims (what you hope to portray and achieve)
 - Your target market / audience
 - Your budget
 - Your time scale
- Research
 - 1 - Develop a theme or concept
 - 2 - Source material and practical elements
- Process Research
 - : Research should reflect the thought processes and personal approach to the project through written reflections, collage, drawing and juxtaposition.
 - : The following elements must be reflected: Inspirational images
 - Colour charts
 - Silhouettes
 - Design details and trims
 - Imagery depicting styling
 - Mood / concept (visual story)
 - Narrative (written story)
- Design Development
 - Garments -
 - : Rough sketches (minimum of 50 rough sketches)
 - : Although sketches are 'rough' they should still be neat, proportionate and detailed, front and back views should be shown and openings / closures should be indicated.
 - : Indicate design fabrication and colour for each design so that a clear valuation of the design can be conducted.

Due Date: Monday, 3 April 2017

Cycle 2 - Design Development

- Edit design work
- Select final line of eight (8) ensembles
- Select final ensembles (3) to be constructed: Produce Specification sheets with working technical drawings of the garments to be constructed in pattern drafting.
- Produce final story boards - these should reflect: Colour, Mood, Swatches and trims, Silhouette, design and styling, Narrative
- Illustrate final range of eight (8) ensembles

Due Date:

Submission 1: Visual Diary – Assessment Criteria and Mark Allocation

Out come	Criteria	
Designer profile	Written profile of yourself as a designer, your inspiration, goals etc.	
Brief development		
Aims	Concise statement of what you hope to portray and achieve through your range	
Target market/audience	Clear, concise yet descriptive statement.	
Working budget	Statement of expenses	
Time scale	Draft of deadlines put in place to ensure the success of range production and presentation	
Visual story: Mood/concept board	Clear imagery interpreting the written story, shows colour, texture, print, styling, market, season	
Written story: Narrative draft	Well thought out, expressive, gives clear understanding to final design story	
Process research		
Colour chart	Clear, visual and accurate representation of colour pallet	
Silhouette	Good range of imagery or sketches of ideal silhouette to be used	
Design/styling imagery	Good range of styling imagery depicting self-expressive concept	
Design development		
Rough sketches	Coherent range of rough work and development sketches displaying innovation of idea usage	
Range creation	Clear and visible design statement, contemporary, well balanced, styling details well executed, good use of fabrics and colours	

Weighting: 15%

Cycle 3 - Presentation

Visual

- Ensure storyboards and design boards are professionally presented
- Produce a technical drawing folio, this should include front, back and optional side views of all outfits and should include annotations and specifications where necessary.

Submission 2: Final Design Presentation Boards – Assessment Criteria and Mark Allocation

Out Come	Criteria	Mark Allocation
Design solution		
• Design story	Clear story is evident, story is figurative and threads through from narrative, styling, colours, fabrics and design.	/ 10
• Design ideas	Original, unique, forward thinking, trend research is evident, creative, good balance and proportion is achieved	/ 10
• Range creation	Garments and outfits mesh well together to form a cohesive range, clear and viable design statement, design story is expressed with parallels being created through fabrics, colours, styling, silhouette etc.	/ 10
Presentation boards		
• Mood board	Visual interpretation of the design story, indicating style direction and mood of the range.	/ 5
• Narrative	Written story of the range, not a literal description, good use of language, vocab and grammar.	/ 5
• Concept boards	Visual display of styling, silhouette and design details creatively presented to enhance the final design ideas and indicate the design process.	/ 10
• Swatch/colour board	Neat layout, swatches professionally presented, swatches of a good, uniform size, fabric names indicated.	/ 10
Range presentation		
• Fashion illustration	Figure proportions, stylizing, garment hang and fit correctly on the figure, design styling is clear and visible	/ 10
• Use of medium/fabric rendering	Chosen medium has been executed well, fabrics rendered to create a realistic interpretation, fabric drape is well executed	/ 10
• Overall impression of final line up board	Layout works well, back ground is complementary, colours are reflective of actual swatches	/ 10
TD Folios		

• Technical drawings	Neat, proportionate, symmetrical, design details and openings illustrated accurately.	/ 20
• Labels and descriptions	Clear, concise, accurate, correct terminology.	/ 5
• Over all presentation	Design illustration included, TD's of a good balanced size, spec's included, layout works well, neat and clear, swatches/colour chart included	/ 5
Final presentation	Neat, professional presentation, continuity carried through boards, mounted or laminated, student name is evident, and boards are placed in a logical order of sequence.	/ 10
	TOTAL	/ 130
		%

Weighting: 75%

Verbal

- Prepare a verbal presentation of yourself expressive range.
- The presentation should be 5 -10 minutes long
- Make use of your visual material, fabrics as well as completed garments.
- Power point
- The presentation should include an overview and evaluation of your design process.

Verbal Presentation – Assessment Criteria and Mark Allocation

Out come	Criteria	Mark allocation
Audience Reach		
Body Language	Facial expression, eye contact, posture, gestures, lively, enthusiastic, delivery, no distracting mannerisms	/ 10
Establishing report	Ice breaking, confidence, appropriate, atmosphere, tone, consideration for the listener, question handling	/ 10
Visual/Audio aids	Relevant, appropriate, clear, easy to follow, having impact	/ 20
Speech and voice	Projection, volume, tone, pitch, articulation, tempo, emphasis	/ 10
Content	Interesting, relevant, accurate, original, not superficial, well-prepared, logical, organized structure	/ 30
Language	Fluency, vocabulary, grammar, register	/ 10
Appropriate length	+ 5 minutes	/ 10
	TOTAL	/ 100
		%

Weighting: 10%

Appendix 4



Ethical Clearance letter

To: Fiona Abdo

6 January 2017

Re: Ethical clearance request to conduct action research at the Elizabeth Galloway Academy of Fashion (EGAF)

This letter serves to confirm your request, dated 27 December 2016, to conduct action research within the Design 3 module at the EGAF during the first semester of 2017. The study being in line with academic requirements for the MPhil Degree in Higher Education at Stellenbosch University for which you are currently registered. You are hereby granted consent and ethical clearance to conduct the research with in the following parameters:

- All students participating in the study must be fully informed, both verbally and in writing and must have provided signed consent prior to the studies commencement.
- No bias should be shown by the researcher to any student not wanting to participate in the study.
- All pedagogical changes implemented must be in line with the Design 3 curriculum as well as the relevant EGAF academic policies.
- The study should not negatively impact on the researcher's academic and or other responsibilities at the EGAF.

The management team at EGAF wish you success with the study and offer their full support.

Yours sincerely,

Inez Shaw

ELIZABETH GALLOWAY ACADEMY OF FASHION DESIGN

Appendix 5



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STELLENBOSCH UNIVERSITY CONSENT TO PARTICIPATE IN RESEARCH

Title

How can I foster design students creativity through reflective practice?

You are asked to participate in a research study conducted by Fiona Abdo, from the Faculty of Education at Stellenbosch University. The results of this study will be contributed to a research dissertation. You were selected as a possible participant in this study because you are a **registered 3rd year fashion student at the Elizabeth Galloway Academy of Fashion (EGAF) in 2017** and completed your 2nd year of study in 2016 at the EGAF, having had your design component facilitated by Fiona Abdo.

1. PURPOSE OF THE STUDY

The purpose of this study is to explore how one can foster design students creativity through reflective practice.

2. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

- Actively participate in the reflective exercises embedded within the lesson plans for the 3rd year Fashion design module.
- Complete survey questionnaires regarding your learning and the teaching activities implemented.

3. POTENTIAL RISKS AND DISCOMFORTS

I cannot foresee any risk in this research.

All students in the 3rd year Fashion Design class will participate in the reflective exercises as they form part of the revised lesson plans for 2017.

No discrimination will be passed by the facilitator if a student opts not to participate in the data collection. This will be monitored through a double marking system as well as a moderation procedure.

Time to complete the data collection tools will be allocated within the academic time table, ensuring no personal time is tampered with.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The aim of this study is to foster creativity through reflective practice, participants will learn the value of reflection and if practiced well how it can foster creativity. These are lifelong skills which can continue to be used in the future.

5. PAYMENT FOR PARTICIPATION

No remuneration will be received for your participation in this study.

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained throughout the study. Data will only be discussed in terms of findings and observations. The data collected will only be used for academic purposes and to improve teaching practices at the EGAF. The researcher will ensure that all ethical procedures and practices are followed during the data collection process and will apply ethical methods in analyzing and interpreting the data.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact:

Fiona Abdo

Cell: 072 450 3723

Work: 021 880 0775

E-mail: Fiona@elizabethgalloway.co.za

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE
--

The information above was described to me by Fiona Abdo in English and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily to participate in this study. I have been given a copy of this form.

Name of Subject/Participant

Name of Legal Representative (if applicable)

Signature of Subject/Participant or Legal Representative

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [name of the subject/participant] and/or [his/her] representative _____ [name of the representative]. [He/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in English and no translator was used.

Signature of Investigator

Date

Appendix 6



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**STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH**

Title

How can I foster design students creativity through reflective practice?

You are asked to participate in a research study conducted by Fiona Abdo, from the Faculty of Education at Stellenbosch University. The results of this study will be contributed to a research dissertation. You were selected as a possible participant in this study to form part of a **colleague validation group**.

10. PURPOSE OF THE STUDY

The purpose of this study is to explore how one can foster design students creativity through reflective practice.

11. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

- Participate in colleague validation group meetings, both prior and during the study.
- Provide professional input, advise and support in ethically steering the proposed study.

12. POTENTIAL RISKS AND DISCOMFORTS

I cannot foresee any risk in this research.

13. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The aim of this study is to foster creativity through reflective practice, participants will learn the value of reflection and if practiced well how it can foster creativity.

14. PAYMENT FOR PARTICIPATION

No remuneration will be received for your participation in this study.

15. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained throughout the study. Data will only be discussed in terms of findings and observations. The data collected will only be used for academic purposes and to improve teaching practices at the EGAF. The researcher will ensure that all ethical procedures and practices are followed during the data collection process and will apply ethical methods in analyzing and interpreting the data.

16. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study.

17. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact:

Fiona Abdo

Cell: 072 450 3723

Work: 021 880 0775

E-mail: Fiona@elizabethgalloway.co.za

18. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to me by Fiona Abdo in English and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily to participate in this study. I have been given a copy of this form.

Name of Subject/Participant

Name of Legal Representative (if applicable)

Signature of Subject/Participant or Legal Representative

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [name of the subject/participant] and/or [his/her] representative _____ [name of the representative]. [He/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in English and no translator was used.

Signature of Investigator

Date

Appendix 7

Critical Incident Questionnaire

The following questionnaire forms part of the data collection plan being implemented for an action research study by Fiona Abdo, the study is in line with academic requirements for the MPhil in Higher Education at the Stellenbosch University. The focus of the study is how one can foster design students creativity through reflective practice.

Please take about five minutes to respond to each of the questions below about this week's classes. Don't put your name on the form – your responses are anonymous. Thanks for taking the time to do this. What you write will help me reflect critically on the teaching activities introduced and better my teaching practice.

1. At what moment in the class this week did you feel most engaged with what was happening?

2. At what moment in the class this week did you feel most distanced from what was happening?

3. What action that anyone (teacher or student) took in class this week did you find most affirming and helpful?

4. What action that anyone (teacher or student) took in class this week did you find most puzzling or confusing?

5. What about the class this week surprised you the most? (This could be something about your own reactions to what went on, or something that someone did, or anything else that occurs to you.)

Adapted from:

Brookfield, S. (1995). *Becoming a Critically Reflective Teacher*. San Francisco: Jossey Bass.

Appendix 8

Student Survey

The following questionnaire forms part of the data collection plan being implemented for an action research study by Fiona Abdo, the study is in line with academic requirements for the MPhil in Higher Education at the Stellenbosch University. The focus of the study is how one can foster design students creativity through reflective practice.

Please take about fifteen minutes to respond to each of the open ended questions below. Don't put your name on the form – your responses are anonymous. Thanks for taking the time to do this. What you write will help me reflect critically on the teaching activities introduced and better my teaching practice.

Describe how reflective practices affected your performance and experience in the classroom?

Describe how reflective practices affected your creativity in the class room?

Appendix 9

Observation Schedule

Guided Reflective Exercises

The following observation schedule forms part of the data collection plan being implemented for an action research study by Fiona Abdo, the study is in line with academic requirements for the MPhil in Higher Education at the Stellenbosch University. The focus of the study is how one can foster design students creativity through reflective practice.

- Did the participants respond positively to the presentation of the activity?
- Do the participants appear to be keen?
- Where the participants prepared?
- Did the promotion of dialogue seem forced or natural?
- Did all participants contribute in group activities?
- Did the participants follow the guidelines as prescribed or did they explore further?
- Did the participants exhibit any unexpected behaviours during the activities?
- Did any conflict arise? If so how was the conflict resolved?
- Did the participants fully understand the aim of the activity?
- Did the participants use the full allocated time set aside for the activity?
- Comment on any other relevant observations noted.

Appendix 10

Guided Reflective Activity

Self-reflection of a student fashion designer

Who am I?

What are my core values?

What do I hope others think of me?

What are my strengths?

What are my weaknesses?

How do I cope in adversity?

What are my aims/what do I hope to achieve as a designer?

What is my worst nightmare as a student designer?

My experience as a fashion design student thus far has been.....

If I could rewind and go back to first year what would I do differently?

Appendix 11

Guided Reflective Activity

Artefact Reflection: Level 2 Portfolio

What did you enjoy most about these projects?	
What did you learn from this projects that you can apply to future projects?	
What challenges did you face while working on these projects?	
What would you do differently next time?	
Are you satisfied with the mark awarded for this project? If not please explain why.	
Yes	No

Appendix 12

Guided Reflective Activity

Peer group reflective discussions

Task:

- The students will be divided into 4 groups of 5 students each. A discussion facilitator will be selected in each group to ensure the discussions are kept on track and that each member be afforded the opportunity to contribute.
- Each group is to find a comfortable area to hold a discussion, either in the classroom or within the immediate surrounds.
- Each student should be given the opportunity to reflect on the findings of the previous two reflective activities, the artefacts can be used to demonstrate and achieve understanding.
- Other group members are encouraged to pose questions and comments as the discussions develop.
- Each student is to ensure that they walk away from the discussion with clarity on their direction going forward.
- Produce written reflective notes in your diary of what you gained from the group discussions.

Appendix 13

Guided Reflective Activity

One-on-one facilitator consultations

Task:

- Individual consultations are set, with each student booking a 20minute slot.
- Students are to arrive prepared with their visual diary, the diary should have an indication of design direction, according to the self-expression design brief.
- Students must identify issues of concern or confusion prior to the consultation to enable the consultation to be purposeful.
- The consultation will begin with the student presenting the facilitator with a brief overview of their design concept, using the visual diary as support.
- The consultation will then develop into a discussion as the facilitator provides comment and professional input.
- Students are encouraged to motivate and validate their choices and research.
- The facilitator must ensure that resolution has been achieved by the end of the consultation.